

BEFORE THE NATIONAL GREEN TRIBUNAL, WESTERN ZONE BENCH, PUNE
APPEAL NO. 73 (WZ) OF 2023
WITH
(IA NO. 114/2024)

IN THE MATTER OF:

SWAPNESH SHERLEKAR & ORS.

...APPLICANT(S)

VERSUS

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE & ORS.

...RESPONDENT(S)

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Dated: January 2025

Place:

Filed by:
Respondent No. 1

Through
(Counsel for Respondent No. 1)

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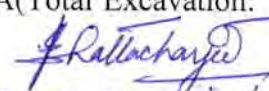
...RESPONDENT(s)

COUNTER AFFIDAVIT ON BEHALF OF THE MINISTRY OF ENVIRONMENT,
FOREST AND CLIMATE CHANGE (RESPONDENT No. 1)

I, Dr. Dola Bhattacharjee, currently working as Scientist "B" in the Ministry of Environment, Forest and Climate Change (MoEF&CC), Regional Office, Bangalore, do hereby solemnly affirm and state as under: -

1. That I, in my official capacity of Scientist "B" in the Ministry Environment, Forest and Climate Change, Bengaluru i.e. Respondent No. 1 in the above-mentioned matter, and as such am authorized and competent to swear this affidavit.
2. That I have read the contents of the present Affidavit.
3. That without prejudice to the above and as an alternative submission, the deponent craves liberty to raise further required contentions during the course of the proceedings if sought by this Hon'ble Tribunal.
4. That, it is most respectfully submitted that the present Appeal challenges the Environmental Clearance granted by the Ministry of Environment, Forest and Climate Change (MoEF&CC) on 23.01.2024 to M/s Vedanta Limited to the project for Bicholim Mineral Block- Block 1 (Auction Block) for mining of Iron Ore with proposed production capacity of 3.10 MTPA, Waste: 25.162 MTPA (Total Excavation:




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28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

PRELIMINARY OBJECTIONS: APPEAL BARRED BY LIMITATION

6. That it is most respectfully submitted that the provision with regard to appeal is provided in the National Green Tribunal Act, 2010 under Section 16(h) which is as follows: *"Tribunal to have appellate jurisdiction. -Any person aggrieved by. (h) an order made, on or after the commencement of the National Green Tribunal Act, 2010. granting environmental clearance in the area in which any industries, operations or processes or class of industries, operations and processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986 (29 of 1986):*

may, within a period of thirty days from the date on which the order or decision or direction or determination is communicated to him, prefer an appeal to the Tribunal: Provided that the Tribunal may, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal within the said period, allow it to be filed under this section within a further period not exceeding sixty days.

7. That, by virtue of section 16 of National Green Tribunal Act, 2010, the period of limitation is 30 days from the date on which the order or decision or direction or determination was communicated. The decision granting Environmental Clearance (EC) to M/s Vedanta Limited was communicated on 23.01.2024, and the 30-day period elapsed on 22.02.2024. However, the appellant filed this appeal on 06.04.2024, resulting in a delay of approximately 44 days.
8. That, the proviso to Section 16, National Green Tribunal Act, 2010 is empowered to condone a delay if the appellant can establish sufficient cause for the same up to a period of 60 days. The appellants has not sufficiently justified invoking the proviso to Section 16. This proviso is intended to assist vigilant litigants who were genuinely prevented from initiating proceedings within the prescribed limitation period. The legal principle *"vigilantibus non dormientibus jura subveniunt,"* rooted in Latin,



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underscores that legal remedies are available only to those who are diligent in protecting their rights.

9. That, in the instant case, the appeal was not filed within the prescribed 30 days, nor has any sufficient cause been shown to justify condoning the delay in filing. Therefore, this Hon'ble Tribunal shall dismiss the present appeal, as the appellant has failed to provide a satisfactory and sufficient reason for the delay in filing it.

REPLY ON MERITS:

10. That, it is most respectfully submitted that the Ministry of Environment, Forest & Climate Change has notified Environment Impact Assessment (EIA) Notification, 2006 under the provisions of the Environment (Protection) Act, 1986 which deals with the process to grant prior Environment Clearances (EC) for the new projects and activities listed in the Schedule of this notification, for expansion and modernization of the existing projects and for any change in product-mix in an existing manufacturing units.
11. That, it is most respectfully submitted that EIA involves assessing the potential environmental effects of a proposed project, encompassing interconnected socio-economic, cultural, and human-health impacts both positive and negative. Furthermore, it's crucial to note that the granting of EC to a project isn't a singular step; it follows a prescribed process outlined in the EIA Notification, 2006, which includes:
 - Stage (1)-Screening
 - Stage (2) Scoping i.e. prescribing Terms of Reference (TOR) or undertaking detailed Environment Impact assessment studies.
 - Stage (3) Public Consultation to be conducted by the respective State Pollution Control Board/UT Pollution Control Committee.
 - Stage (4) - Appraisal - by Expert Appraisal Committee (EAC).
12. That, it is most humbly submitted that, the process involving grant of EC has been done in a transparent manner and it was placed in public domain (PARIVESH portal) including the application for grant of EC, submissions and supporting documents filed



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by the project proponent, the minutes of meeting of the EAC meetings and the EC issued in the case as well.

Project Details:

13. That, it is most respectfully submitted that the Directorate of Mines & Geology, Government of Goa, vide its letter dated 13th January 2023, granted a Letter of Intent (LoI) to M/s Vedanta Limited for the grant of a mining lease for Block 1 of the Bicholim Mineral Block, for Iron Ore mining, over an area of 478.5206 hectares, for a period of fifty (50) years, in accordance with the provisions of the Mines and Minerals (Development and Regulation) Act, 1957, and the Mineral (Auction) Rules, 2015.
14. That, it is further most respectfully submitted that the instant project falls under the screening category of 'A' as per Activity 1(a) of the Environment Impact Assessment (EIA) Notification dated 14th September 2006, and subsequent amendments thereto, as the total extent of the project exceeds 250 hectares.
15. That, it is most respectfully submitted that the online proposal submitted by M/s Vedanta Limited concerning the fresh Terms of Reference (ToR) was received on 16th March 2023 and duly considered by the Expert Appraisal Committee (EAC) during its 14th meeting held on 3rd-4th May 2023. Following thorough deliberations, the EAC recommended the proposal for the grant of the ToR. In line with this recommendation, the respondent issued the ToR on 16th June 2023 to M/s Vedanta Limited for the mining of iron ore in Bicholim Mineral Block 1 (Auction Block), with a proposed production capacity of 3.0 MTPA, a waste generation of 25.162 MTPA (total excavation: 28.162 MTPA), and a crushing and screening plant capacity of 4.0 MTPA. The project is located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem, and Sirigao Villages of Bicholim Taluka, North Goa District, Goa, covering a mine lease area of 478.5206 hectares. The ToR was issued under the EIA Notification, 2006, and its amendments, for conducting a detailed EIA/EMP study and public hearing, as per the prescribed procedure, subject to specific and standard ToR conditions for non-coal mining projects. A copy of the ToR letter dated 16th June 2023 is annexed as **Annexure-R1/1**.

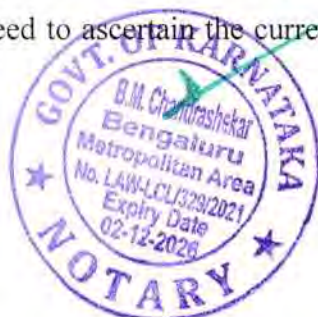


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Office: Regional Office, Sion
SF No: 1034

16. That, it is most respectfully submitted that, the mandate of the EIA Notification, 2006 as stated in paragraph no. 7-III-(iii) provides that *"...the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45 (forty-five) days of a request to the effect from the applicant.."*
17. That, it is most respectfully submitted that as per the EIA Notification, 2006, the Answering Respondent, while issuing the Terms of Reference (ToR), necessitates public hearings to be conducted by the State Pollution Control Board.
18. That, it is most humbly submitted that the public hearing for the project was conducted on 11.08.2023 at the Narayan Zantye Multipurpose Sports Complex, Sarvan Village, Bicholim Taluka, North Goa District, Goa, under the chairmanship of Ms. MamuHage (IAS), Collector, North Goa, and Dr. Mohan Girap (Scientist-C), Goa State Pollution Control Board. Approximately 4,708 written objections were submitted against the project, while around 5,183 letters were received in support of it. A budget of ₹309.3 lakhs has been allocated to address the concerns raised during the public hearing.
19. That, it is most respectfully submitted that, based on the compliance with the Terms of Reference (ToR) conditions, M/s Vedanta Limited, through proposal no. 1A/GA/MIN/442593/2023 dated 01.09.2023, applied for fresh Environmental Clearance for the mining of iron ore in the Bicholim Mineral Block Block 1 (Auction Block). The proposed production capacity is 3.0 MTPA, with waste generation of 25.162 MTPA (total excavation: 28.162 MTPA), along with a crushing and screening plant with a capacity of 4.0 MTPA. The mine lease area covers 478.5206 hectares, located in the villages of Bicholim, Bordem, Lamgao, Mulgoa, Mayem, and Sirigao in Bicholim Taluka, North Goa District, Goa.
20. That, It is most respectfully submitted that the proposal for the grant of Environmental Clearance (EC) was initially deliberated by the Expert Appraisal Committee (EAC) for Non-Coal Mining projects during its 20th meeting held on 21st-22nd September 2023. Following a detailed review of the proposal, the EAC decided to defer and expressed the need to ascertain the current ground reality concerning several aspects,



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including the handling of waste, settling ponds, location of the waste dump with respect to habitation, schools, rivers, and other surface features such as forests (particularly the Mayem common boundary), temples, caves, and forts. Additionally, the EAC sought clarification on the mineral transportation route and potential traffic congestion. The Committee further recommended that a site visit be conducted by a sub-committee comprising EAC members and officers from the Ministry of Environment, Forest and Climate Change (MoEF&CC). A copy of the minutes of the 20th EAC (Non-Coal Mining) meeting held on 21st-22nd September 2023 is annexed herewith as **Annexure No. R1/2**.

21. That it is most respectfully submitted that as recommended by the EAC in the 20th EAC meeting, the Ministry vide letter dated 09.10.2023 constituted a subcommittee comprising of the following members to ascertain the ground realities of the project:

1. ShriNiranjankumarVasu, EAC (Non-Coal Mining), Member,
2. Shri. Avijit Ghosh, EAC (Non-Coal Mining), Member,
3. Shri. Pankaj Verma, Scientist E & Member Secretary EAC (NCM).MoEF&CC,
4. Shri. Saurabh Upadhyay, Scientist C, MoEF&CC,
5. Shri Suresh Kumar Adapa, Scientist E, MoEF&CC, Bengaluru;
6. Shri. A. Mohankumar, Consultant, MoEF&CC.

Copy of the letter dated 09.10.2023 is annexed herewith as **Annexure No. R1/3**.

22. That it is most respectfully submitted that, as recommended the aforesaid committee undertook the site visit on 29th-31 October 2023. The subcommittee during the site visit observed and made the following recommendations of the Sub-committee:

1. *"The Project Proponent needs to submit the techno economic feasibility report for Laying Over Land Belt Conveyor (OLBC) from the mine lease area to Sarmanas Jetty.*
2. *The subcommittee asked the Project Proponent to submit the ecology restoration plan for mined out pits for using as Water reservoir/Pisciculture.*
3. *The subcommittee noted that the transfer of material from one pit to other working pit will lead to transportation issues. The subcommittee asked the Project Proponent to identify the shortest lead distance and also to explore the possibility of concurrent*



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backfilling. The Project Proponent also needs to submit the sequential stage wise mining in top and bottom working pits and their backfilling plan

4. The Project Proponent needs to submit the action plan for strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge. The action plan for monitoring the water level and water quality before discharge needs to be submitted.

5. The design of garland drain around the waste dumps to divert the water to settling ponds and the measures to be taken to arrest the suspended solids needs to be submitted. The measures to be taken for preventing the soil erosion on slope of waste dumps needs to be submitted.

6. The Project Proponent needs to submit the action plan for installing permanent water sprinklers.

7. The Project Proponent needs to submit the action plan and timeline to modify the crushing and screening units. The Project Proponent also needs to submit the material flow sheet and material balance.

8. The Project Proponent needs to submit the action plan for developing their own nursery by mentioning the details of the area to be covered, species to be planted and budget proposed. Most of the standing vegetation in the lease area constitutes of *Acacia auriculiformis* and *Casuarinaequisetifolia* and it is further invading the open areas through natural regeneration. The invasion may be checked through planting native species in the region.

9. The Project Proponent needs to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022 or not. Accordingly, the Project Proponent shall submit the revised authenticated Schedule-I species. The Project Proponent also needs to submit the breakup of the conservation activities proposed under Wildlife Conservation Plan

10. The Project Proponent needs to submit the map demarcating the surface features in the mine lease area and their safety distances left/maintained as per mines acts and rules.

11. The Project Proponent needs to provide proper treatment of channels and nallas flowing in the lease area for soil and water conservation. Scientifically designed and placed check dams and other engineering structures at different places can help



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control the erosion and loss of productive soil. Necessary study from competent institution/individuals may be done for this purpose."

23. That, it is most respectfully submitted that, the EAC deliberated on the report of the Sub- Committee in its 22nd EAC (Non-Coal Mining) meeting held during 14-15 November, 2023. The EAC deliberated on the observation and recommendations of the subcommittee. After detailed deliberations, the EAC agreed to the recommendations of the subcommittee. Copy of the minutes of 22 EAC (Non-Coal Mining) meeting is annexed herewith as **Annexure No. R1/4.**
24. That, it is most respectfully submitted that the Project Proponent uploaded the required information, along with the compliance of the site visit report, on the Parivesh portal on 04.12.2023. The proposal was subsequently considered during the 24th EAC (Non- Coal Mining) meeting held from 26-28 December 2023. After detailed deliberations by the Project Proponent and the EIA Consultant, and in accordance with the provisions of the EIA Notification 2006 and its subsequent amendments, the EAC recommended granting Environmental Clearance (EC) to M/s Vedanta Limited for the Bicholim Mineral Block-Block 1 (Auction Block) for mining of iron ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa subject to the certain specific conditions in addition to the standard EC conditions applicable for non-coal mining projects. Copy of the minutes of the 24th EAC (Non-Coal Mining) meeting is annexed herewith as **Annexure No. R1/5.**
25. That, it is most respectfully submitted that, based on the recommendation of the EAC, the answering respondent, accorded the Environmental Clearance (EC) vide letter dated 23.01.2024 to M/s Vedanta Limited for Bicholim Mineral Block Block 1 (Auction Block) for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of BicholimTaluka of North Goa District, Goa, subject to compliance of the terms &



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conditions and the environmental safeguards. Some of the specific conditions are as follows:

- a. *The budget of Rs 309.3 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.*
- b. *The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.*
- c. *The Hon'ble Supreme Court has imposed a capping on mining of iron ore to 20 MTPA for the entire State of Goa. Accordingly, the Project Proponent shall first obtain the necessary permission from the competent authority with regard to the amount of mineral they can mine per year, before starting its mining operation.*
- d. *As committed before the EAC, the Project Proponent needs to explore the feasibility for installing conveyor belt system for transportation.*
- e. *As committed by the Project Proponent, existing trucks of 10.5 Tonnes shall be replaced with higher capacity trucks of 25 Tonnes in phased manner to reduce traffic load and emissions per tonne/km.*
- f. *Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC. Regular sprinkling shall be done on roads to suppress the dust at the source.*
- g. *The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.*
- h. *The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.*

Copy of the EC letter dated 23.01.2024 is annexed herewith as **Annexure No. R1/6.**



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SPECIFIC REPLY TO THE ALLEGATION OF THE APPELLANT:

26. That, it is most respectfully submitted that, the process of granting Environmental Clearance (EC) by the answering respondent has been conducted with the due diligence and in compliance with the procedure outlined in the EIA Notification 2006 (as amended). The contention that the project has been incorrectly classified as a Greenfield project is baseless and without merit. The classification is consistent with Clause III (iii) of the Office Memorandum (OM) dated 31.03.2011, which provides that *"all cases of grant/renewal of EC for any abandoned mine or sick project under revival, etc., shall be treated as a Greenfield project for the purpose of appraisal under the EIA Notification, 2006, and the prescribed procedure shall be followed."* Moreover, the Letter of Intent for the project was duly issued by the State Government in 2023, further affirming the appropriateness of the classification. Copy of the OM date 31.03.2011 is annexed herewith as **Annexure No. R1/7**.
27. That it is most respectfully submitted that the allegation of the appellant regarding the grant of Environmental Clearance (EC) without proper application of mind is misplaced and devoid of merit. The appellant has alleged that the EIA report prepared by the Project Proponent (PP) violates the EIA Notification, 2006, as its baseline data collection commenced in 2023 despite the mine being in operation since 1941. However, as per the Office Memorandum (OM) issued by the answering respondent dated 08.06.2022, it is mandated that the baseline data must not be older than three years at the time of submission of the EC application. In the present case, the baseline data was collected during the summer season from March 2023 to May 2023, which is well within the prescribed guidelines of the OM. Therefore, the allegation of the appellant is baseless and lacks substance. Copy of the OM date 08.06.2022 is annexed herewith as **Annexure No. R1/8**.
28. That it is most respectfully submitted that the allegation of the appellant regarding the absence of an approved Wildlife Conservation Plan (WLCP) by the Chief Wildlife Warden for the proposed project is without merit. The Wildlife Conservation Plan has been duly prepared by the Project Proponent (PP), and the Environmental Clearance (EC) granted on 23.01.2024 includes a specific condition requiring the PP to follow



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up on the implementation status of the WLCP with Forest Officials and to submit updates in the six-monthly compliance reports to the Ministry's Regional Office. As per the six-monthly compliance report submitted by the PP on 30.11.2024, it is confirmed that the WLCP is under scrutiny and will be executed in consultation with the Forest Department once approved. Therefore, the appellant's claim lacks substance and does not hold any merit.

29. That it is most respectfully submitted that the allegation of the appellant regarding the refusal of the Project Proponent (PP) to comply with the Expert Appraisal Committee (EAC) recommendations to mitigate air pollution through the creation of an Over Land Belt Conveyor (OLBC) for material handling and increasing the efficiency of trucks engaged in material handling is unfounded and lacks merit. The six-monthly compliance report submitted by the PP on 30.11.2024 addresses both points. Regarding the creation of the OLBC, the PP has submitted that it has explored the feasibility of an OLBC with a capacity of 3 MTPA, covering a length of 5.772 km from the dry mineral processing plant to Sarmanas Jetty. The PP further stated that detailed studies and assessments are underway to determine the optimal system for implementation, considering the specific mine conditions, livelihood of local stakeholders, and long-term operational benefits. With respect to increasing the efficiency of trucks engaged in material handling, the PP reported compliance with the condition and clarified that most of the road used for transportation is a dedicated road corridor. Therefore, the allegations of the appellant are baseless and do not have any merit. Copy of the six-monthly compliance report submitted by the PP on 30.11.2024 is annexed herewith as **Annexure No. R1/9**.
30. That, it is most respectfully submitted that, the State Department of Mines and Geology is the Nodal Authority in the State for dealing with the allotment of mining leases under the Mines and Minerals (Development and Regulation) Act (MMDR Act) and is entrusted with the enforcement and regulation of mining operations in a State including illegal mining. Further, the State Government is empowered under Section 23 C of the Mines and Minerals (Development and Regulation) Act 1957(MMDR Act) to make rules for prevention of illegal mining, transportation and storage of minerals.



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31. That, it is most respectfully submitted that, the State Pollution Control Board is the Nodal Authority in the State for dealing with cases related to pollution or environment management coming under the purview of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment Protection Act 1986.
32. That it is most respectfully submitted that, **the answering respondent will adopt this affidavit in Appeal No. 146/2024, titled Federation of Rainbow Warriors v. Union of India and Others, as the appellants in this appeal have similarly sought the quashing of the same Environmental Clearance (EC).**

PRAYER:

In view of the above submissions, it is most respectfully prayed that this Hon'ble Tribunal may be pleased to:

- a. Dismiss the present appeal along with **Appeal No. 146/2024 (*Federation of Rainbow Warriors v. Union of India and Others*)**, as the appellants in both cases have failed to establish any valid grounds for setting aside the impugned Environmental Clearance (EC) granted to Respondent No. 3;
- b. Further dismiss the appeal on the grounds of limitation, as the Appellants have not provided sufficient cause or proper justification for the delay in filing the appeal;
- c. Pass any other order(s) that this Hon'ble Tribunal may deem fit and proper in the facts and circumstances of the case, in the interest of justice.

DEPONENT

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VERIFICATION:

Verified at Bengaluru on this 16th day of January 2025 that the contents of this affidavit based on official record(s) maintained and information available in the office are true and correct, no part of it is false and nothing has been concealed there from.

DEPONENT**Dr. Dola Bhattacharjee**

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**SWORN TO BEFORE ME**

134u

B.M. CHANDRASHEKAR

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सत्यमेव जयते

File No: IA-J-11015/3/2023-IA-II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 16/06/2023



To,

Krishna Reddy
VEDANTA LIMITED
Sesa Ghor, 20 EDC Complex, Patto, Panjim, NORTH GOA, GOA, 403001
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Subject: Grant of Terms of Reference (ToR) under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference (EC) under the provision of the EIA Notification 2006-regarding in respect of project Block 1- Bicholim Mineral Block for Iron Ore submitted to Ministry vide proposal number IA/GA/MIN/422323/2023 dated 09/06/2023.

2. The particulars of the proposal are as below :

(i) ToR Identification No.	TO23A0000GA5700309N
(ii) File No.	IA-J-11015/3/2023-IA-II(NCM)
(iii) Clearance Type	Fresh ToR
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining
(vii) Name of Project	Block 1- Bicholim Mineral Block for Iron Ore
(viii) Name of Company/Organization	VEDANTA LIMITED
(ix) Location of Project (District, State)	NORTH GOA, GOA
(x) Issuing Authority	MoEF&CC
(xi) ToR Date	16/06/2023
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	yes

This has reference to the online proposal no. IA/GA/MIN/422323/2023 dated 16.03.2023 for grant of terms of reference (ToR) for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa

District, Goa.

The details of the project and the recommendations of the EAC is at Annexure-I

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Iron Ore	Iron Ore	3000000	Tons per Annum (TPA)	Combination of two or three modes	mine to Iron Ore loading jetty by road and from jetty to port by water way (Through Barges)

Specific Terms of Reference

Specific Terms of Reference Mining of minerals

1. Waste Management

Sr. No	Specific Terms of Reference
1.1	The Project Proponent needs to submit the action plan for year wise backfilling

2. Land Environment

Sr. No	Specific Terms of Reference
2.1	The Project Proponent needs to submit the plan for ecology restoration

3. Water Environment

Sr. No	Specific Terms of Reference
3.1	The Project Proponent shall prepare the scheme for mandatory recycle/reuse of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
3.2	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
3.3	The Project Proponent shall carry out the assessment of impact due to the proposed project as per

Sr. No	Specific Terms of Reference
	the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
3.4	The Project Proponent needs to explore the likelihood of river water entering into the mine pit below the RL of the HFL and the measures that are required to be taken for prevention of seepage and in the event of seepage to drain out the water through settling tank.
3.5	The EAC noted that the mine lease area is in close proximity to the Assnora River (flowing adjacent to the mine lease boundary on the north western side). The Project Proponent needs to submit the detailed report on the engineering design for garland drain, settling tank and check dams and its efficacy through recognized institution. The study should also include the per day silt load, settling velocity of the silt, retention time required based on the annual rainfall with a provision to monitor the water quality

4. Miscellaneous

Sr. No	Specific Terms of Reference
4.1	The Project Proponent shall ensure the validity of the baseline data and public hearing are valid as per Ministry's OM dated 08.06.2022 at the time of submission of proposal for EC.
4.2	The Project Proponent needs to submit the action plan for shifting the School within the mine lease area. PP should also provide the details of the nearest school present within the mine lease area and in the vicinity of the mine lease area by mentioning the distance and direction of the school from the mine lease area, strength of the school, working time of school, blasting time and the measures to be taken for control of ground vibration and fly rock.
4.3	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
4.4	The Project Proponent needs to submit the detailed site specific protection measures for the surface features such as habitations, water bodies, school, temple, road in and around the vicinity of the mine lease area.
4.5	The instant ToR is subject to the outcome of the two said court cases i.e., WP(Civil) 2478 of 2022 (Filing Number) before the High Court of Bombay at Goa and WP 592 of 2022 before the High Court of Bombay at Goa.
4.6	During the meeting, the EAC noted that old excavated pits exist within the mine lease area. Hence, the Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?

5. Greenbelt

Sr. No	Specific Terms of Reference
5.1	The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report

6. Socio Economic

Sr. No	Specific Terms of Reference
6.1	The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training
6.2	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

7. Transportation

Sr. No	Specific Terms of Reference
7.1	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. The Project Proponent shall ensure that the transportation route shall not pass through any village road.

8. Environment Monitoring

Sr. No	Specific Terms of Reference
8.1	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution
8.2	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline

Standard Terms of Reference for 1(a) Mining of minerals

Activity: Mining of minerals

Standard Terms of Reference Mining of minerals

1. Project Details

Sr. No	Standard Terms of Reference
1.1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
1.2	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/transfer/extension of validity.
1.3	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
1.4	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
1.5	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
1.6	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.7	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
1.8	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1.9	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1.10	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project.

Sr. No	Standard Terms of Reference
	Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1.11	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1.12	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1.13	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

2. Forest

Sr. No	Standard Terms of Reference
2.1	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.2	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

3. Land Environment

Sr. No	Standard Terms of Reference
3.1	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
3.2	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.3	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
3.4	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

4. Wildlife

Sr. No	Standard Terms of Reference
4.1	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
4.2	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-I species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
4.3	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.

5. Baseline Environment

Sr. No	Standard Terms of Reference
5.1	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM ₁₀ , particularly for free silica, should be given.
5.2	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
5.3	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.

6. Water Environment

Sr. No	Standard Terms of Reference
6.1	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
6.2	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

7. Hydro Geology

Sr. No	Standard Terms of Reference
7.1	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
7.2	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
7.3	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

8. Transportation

Sr. No	Standard Terms of Reference
8.1	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

9. Land Acquisition and R&R

Sr. No	Standard Terms of Reference
9.1	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval

Sr. No	Standard Terms of Reference
	from State land use board or the concerned authority.
9.2	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

10. Socio-Economic Environment

Sr. No	Standard Terms of Reference
10.1	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
10.2	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
10.3	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

11. Environmental Monitoring and Management

Sr. No	Standard Terms of Reference
11.1	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.

12. Critically Polluted Areas, Aravali & CRZ

Sr. No	Standard Terms of Reference
12.1	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or

Sr. No	Standard Terms of Reference
	State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.

13. Risk Assessment & Disaster Management

Sr. No	Standard Terms of Reference
13.1	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
13.2	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

14. Miscellaneous

Sr. No	Standard Terms of Reference
14.1	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Additional Terms of Reference

1.The prescribed TOR would be valid for a period of four years for submission of the EIA/EMP report, as per the notification S.O 751 (E) dated 17.02.2020. The instant TOR is valid up to four years from the date of issuance of TOR.

2.The Project Proponent should submit the EIA/EMP report as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006 after incorporating the details of public hearing conducted and covering the above-mentioned issues, to take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed

under the EIA Notification, 2006.

Copy To

1. **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. **The Secretary**, Department of Mines and Geology, Ground Floor of Institute Menezes Braganza, Government of Goa.
3. **The Director**, Department of Environment and Climate Change (DoE and CC), Government of Goa.
4. **The Secretary**, Department of Forests, Government of Goa, Goa Van Bhavan, Goa.
5. **The Chief Wildlife Warden**, Goa Van Bhavan, Forest Department, Altinho, Panaji Goa. 403001.
6. **The Deputy Director General of Forests (C)**, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore - 560034.
7. **The Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
8. **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
9. **The Member Secretary**, Goa State Pollution Control Board, Nr. Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Goa 403511.
10. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
11. **The District Collector**, North Goa District, Government of Goa.
12. **Guard File**.
13. **PARIVESH Portal**.

Annexure I

The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 15°34'20.518"N to 15°36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. Details of Mine Lease:
 - a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgao Mayem & Singao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

v. Details of Mining Plan:

- a) The Project Proponent has submitted that the Mining Plan is submitted to Indian Bureau of Mines (IBM), Goa for approval and is under process.
- b) The method of mining will be opencast mechanized without drilling and blasting. Total Mineral Reserves & Resources estimated as 84.743 million tonnes. Life of the mine will be 30 years @ 3.0 MTPA.
- c) The proposed bench height and width will be 7m and 10-12 m respectively. The individual bench slope will be 70° and overall pit slope will be 27°.
- d) The ore will be transported from Mine to Sarmanas jetty through dedicated road with only 0.9km stretch of public road in use.

vi. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD

	Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.	
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.	

vii. Nearest village / town/ highway/railway station / water bodies/monument

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railway station	10.5 km, North
Water Bodies	Asnora River	Touching lease boundary at one of the points
	Mandovi River	2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idgah	Within the lease area
	Shri Lairae Temple	0.86 km

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	No	No Forest land is involved in the mine lease area. The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 Km Ambadgaon RF - 7.4 Km
National park	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/ 968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. i. Madei Wild life Sanctuary-14.105 km, E ii. Salim Ali Bird Sanctuary -10.553 km, SW iii. Bondla Wild life Sanctuary -20.476 km, SE
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	

ix. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant & plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

x. Rehabilitation & Resettlement:

R & R details	Not Applicable, as no resettlement is proposed during life of mine.

xi. Details of Court Cases:

Court Case	Yes
Additional information (if any)	First Case: 1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extend it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order Vedanta limited was added as a party to the petition as it has won the mine in auction. Second Case: 1. WP 592 of 2022 before the High Court of Bombay at Goa 2. The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to extend it fails to include the essential facts and in the alternative to stay the auction. 3. Case status is pending 4. No adverse orders have been passed.

	5. As per the last order Vedanta limited was added as a party to the petition as it has won the mine in auction

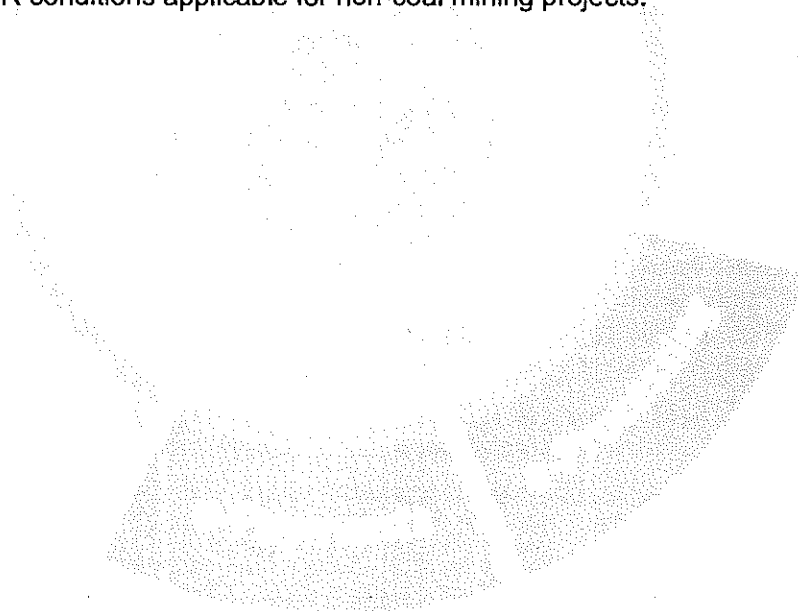
- xii. The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
- xiii. The total project cost estimated as Rs 250.0 Cr. The employment potential of direct employment will be 433 no.s and indirect employment will be 195 no.s.

2. The proposal was considered by the EAC of Non Coal Mining projects in its 14th meeting held on 3-4 May, 2023. Wherein the Project Proponent informed the EAC that the instant mine lease was obtained through auction and the Government of Goa granted the Letter of Intent (LoI) dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, MulgaoMayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Ha for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance. Then, the Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10km radius. The EAC asked the Project Proponent to show the locations of the village, school and road in and around the mine lease area. The Project Proponent informed the EAC that the Assnora River is flowing adjacent to the mine lease boundary on the north western side. Few habitations, a temple and a primary school exists within the mine lease area. Habitations will not be disturbed. No forest land is involved in the mine lease area. Only acacia plantations exist within the mine lease area. The Project Proponent also informed the settling ponds are under construction. The EAC on viewing the KML file noted that old excavated pits exist within the mine lease area and Assnora River is located close to the proximity of the mine lease area. The Project Proponent informed the EAC that the ore will be transported from Mine to Sarmanas jetty through dedicated road with only 0.9km stretch of public road in use.

The EAC asked the Project Proponent whether there is any ban on mining activity in Goa. The Project Proponent informed the EAC that mining activity was not stopped because of CRZ and it may relate to sand mining only. The Project Proponent informed the EAC that the instant mine is a first auction mine in Goa. The Project Proponent also informed the EAC that there will be no activity of drilling and blasting. Mining Plan has been submitted to Indian Bureau of Mines (IBM) for approval. Nearest Village of ESA of Western Ghats is Bayalvada Village - 11.84 km. Waste will be dumped and backfilled within the mine lease area. The Project Proponent informed the EAC that there are two court cases filed against the State Govt. regarding auction procedure and the Project Proponent has been added as a party. There is no stay order or any adverse orders and the court case is in preliminary stage. The EAC was of the view that the instant ToR is subject to the outcome of the two said court cases i.e., WP(Civil) 2478 of 2022 (Filing Number) before the High Court of Bombay at Goa and WP 592 of 2022 before the High Court of Bombay at Goa. The EAC asked the

Project Proponent to inform about the present status of the mining in Goa w.r.t Hon'ble Supreme Court order dated 07.02.2018. The Project Proponent informed the EAC that as per Hon'ble Supreme Court order dated 07.02.2018 in Special Leave to Appeal (Civil) No. 32138 of 2015 in the matter of the Goa Foundation vs M/s Sesa Sterlite Ltd. And Ors it was stated the State of Goa was not under any constitutional obligation to grant fresh mining leases through the process of competitive bidding or auction and the Ministry of Environment and Forest was obliged to grant fresh environmental clearances in respect of fresh grant of mining leases in accordance with law.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 3-4 May, 2023, the EAC under the provisions of EIA Notification 2006 and its subsequent amendments, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa for undertaking detailed EIA/EMP study subject to the specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects.



Validity unknown

Digitally Signed by : Mr Pankaj Verma
Member Secretary, MoEFCC (EC)

Date: 16/06/2023



Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Non-Coal Mining)



Minutes of Expert Appraisal Committee meeting Non-Coal Mining held from
21/09/2023 to 22/09/2023

Date: 29/09/2023

MoM ID: EC/MOM/EAC/553451/9/2023

Agenda ID: EC/AGENDA/EAC/553451/9/2023

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

21/09/2023	10:30 AM	05:30 PM
22/09/2023	10:30 AM	05:30 PM

1. Opening remarks

The 20th meeting of the Re-constitution of Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 21-22 September, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

2. Confirmation of the minutes of previous meeting

The minutes of the 19th EAC meeting held during 24-25 August, 2023 were placed before the members of the EAC.

3. Details of proposals considered by the committee

Day 1 -21/09/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Majhgawan Diamond Mine of M/s. NMDC Ltd for 0.72 LTPA of overburden removal and processing of kimberlite ore (8 LTPA) for production of 1.00 lakh carats of Diamond per annum within mine lease area of 162.631 Ha (Supplementary Mine Lease) Located at Majhgawan, Tehsil & District Panna, Madhya Pradesh by NMDC LIMITED located at PANNA,MADHYA PRADESH

Proposal For

Fresh EC

Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/442291/2023	J-11015/121/2018-IA-II(M)	02/09/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal of M/s NMDC Ltd. is for mining of Diamond in Majhgawan Diamond Mine for 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamond per annum in the mine lease area of 162.631 Ha (Supplementary mine lease), located at Village Majhgawan, District Panna, Madhya Pradesh.

3.1.3. Deliberations by the EAC in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

3.1.5. Recommendation of EAC

Deferred for ADS

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Expansion of Jilling Langalotta Iron Ore Mine by ODISHA MINING CORPORATION LIMITED located at KENDUJHAR, ODISHA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/440292/2023	J-11015/959/2007-IA.II(M)	15/08/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

1. The instant proposal is for mining of Iron Ore in Jilling Langalotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste-7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

i. The mine lease area is located between Latitude 21°56'37.5297"N to 21°08'53.4185"N and Longitude: 85°25'08.8832"E to 85°26'37.1370"E. The mine lease area falls under the Survey of India Toposheet No: 73F/8 and 73G/5 and falls in Seismic Zone-II.

ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.

iii. The Project Proponent has submitted that the previous lessee obtained Environmental Clearance for a production capacity of 6.28 MTPA of Iron Ore vide EC letter J-11015/959/2007-IA-II (M) dated 7th June 2012.

iv. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
13.04.2021	IA-J11015/34/2021-IA-II(M) IA/OR/MIN/207724/2021	13-16 July, 2021	Terms of Reference of M/s Odisha Mining Corporation for Jilling Langalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 15.668 Million TPA [Saleable Iron ore- 9.239 Million	04.08.2021

			TPA, Mineral rejects-0.761 Million TPA, Waste 5.668 Million TPA, Topsoil: Nil] with proposed 1 x 2000 TPH stationary multistage crushing & screening plant along with existing 1x300 TPH Stationary Crusher Plant (In pit plant), 1x300 TPH Stationary Crusher Plant (OCU1), 1 x 200 TPH Stationary Crusher Plant (OCU-2), 1 x 300 TPH Stationary Crusher Plant (OCU-3), 1 x 200 TPH Stationary Crusher Plant (OCU-5), 1 x 400 TPH Mobile Crusher Plant, 1 x 50 TPH Stationary Screening Plant, 1 x 150 TPH Mobile Screening Plant, 1 x 100 TPH Mobile Screening Plant, 5 x 150 TPH Mobile Screening Plant at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	
26.10.2022	IA-J11015/ 34/2021-IA-II(M) IA/OR/MIN/ 292822/2022	9-11 November, 2022	Amendment in Terms of Reference (ToR) dated 04.08.2021 for M/s Odisha Mining Corporation Limited for Jilling Langalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 17.4385 Million TPA [Saleable Iron ore-7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste-7.4385 Million TPA, Topsoil: Nil] along with Existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150	28.11.2022

			TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity – 1000 TPH (Portable Screening Units), 4 x 250 TPH, located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	

v. Details of Mine Lease:-

S.no	Grant of Pl/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Reservation of Jilling-Langlotta Iron Ore vide No 299/ IV(AB)SM-01/ 2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
2	Letter of Intent vide 307/IV(AB) SM-01/2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
3	Order No 317/IV (AB) SM-01/ 2021/SM and Order is valid for a period of 2 years from the date of execution of the lease deed or till the date of getting fresh approvals, clearances, licenses, permits and the like whichever is earlier.	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
4	Grant of mining lease vide order no 338/SM	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha

						(as per RoR)

vi. Details of executed Mine leases

S.no	Date of grant of Lease execution	Period of Grant		Details	
		From	To		
1	Date of entering into original lease deed.	11.01.2021	10.01.2031	Certificate No: OD01560940427432T	IN-

vii. Land Use/Land Cover of the Mine Lease Area:

Private land	42.001 ha	
Forest Land	392.289 ha	
Non-Forest Govt. Land	21.747 ha	
Total Mining lease area (MLA)	456.037 ha (as per DGPS Survey)	
Private land for crusher, workshop & other infrastructure outside the MLA	All facilities within ML Area	
Additional information(if any)	ML Area 456.100 ha as per RoR	

viii. Details of Mining Plan: -

Modification of Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	Lr No. MPM/A/15-ORI/BHU/2021-22/1241
	Date	18.11.2021
	MLA	456.037 ha (as per DGPS)/ 456.100 ha (as per RoR)
	Mineral	Iron Ore (Major Mineral)
	Validity	Up to 2024 - 25
Additional information (if any)	On account of correction in the waste quantity, a corrigendum to the Mining Plan Approval Letter was issued by IBM vide letter No. ORI/IRON/KJR/MCDR-93/BBS dated 11.10.2022	
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanised Open Cast Mining	
Drilling/Blasting	In Jilling-Langalotta, Jilling-Gangaigora and Appahatu quarries 13 m and 11 m deep boreholes respectively will be drilled using 115 - 150 mm dia DTH drills. These will be filled with explosives and blasted. The powder factor has been estimated to be 12 t/kg. The explosives consumption at the 6.28 MTPA stage ~875 t/yr which is expected to increase to 1306 t/yr at the 10 MTPA stage.	
Bench Height	10 m	
Bench Width	10 - 15 m	
Individual bench slope	80° - 85°	
Overall pit slope	45°	
Life of mine	8 years incl. present plan period. May be revised on basis if reserves are updated on basis of further detailed exploration	
RoM output size	10.0 MTPA	
Transportation details	At least 70% of the production will be despatched by railway wagons from private siding located within ML area. Max. 30% of production will be despatched by road.	
Dumpers capacity	28 nos. 60 t capacity + 40 nos. 80 t capacity	
OB/Waste	About 11.59 Mm3 overburden will be generated and 1.74 Mm3 will be dumped in existing active external OB dump within ML. About 0.528 Mm3 will be dumped in 2 new external OB dump within mine lease.	

	Balance 9.32 Mm ³ will be used for backfilling exhausted quarries. All mineral rejects, generated during the residual mine life to be blended with high quality iron ore & sold. Accumulated stock of mineral rejects, presently dumped in 2 nos. external dumps to be re-handled and sold off with / without blending. Any top soil to be generated shall be concurrently used in plantation.
Additional information (if any)	One of the existing open cast quarries (out of the four) exhausted. These will be backfilled.

ix. Water requirement:

Total water requirement	1166 m ³ /day	Fresh water	916 m ³ /day
		Treated water	250 m ³ /day
Source	Ground water and Surface water		
Permission	No Objection Certificate has been obtained from CGWA vide letter no. CGWA/NOC/MIN/REN/1/2023/7964 dated 22-06-2023 for abstraction of fresh water of 480 m ³ /day and is valid up to the period 30.03.2024.		
Additional information(if any)	In future, about 916 m ³ /day of fresh water is required, 436 m ³ /day shall be drawn from DalkoNala which flows through the ML area. OMC is submitting an application to the Department of Water Resources, Govt. of Odisha for drawal of water from DalkoNala. The balance 480 m ³ /day (only for potable use) shall be drawn from bore-wells.		

x. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Jalahari Jurudi	Part of Village located within NW part of ML area Adjacent to M.L. area on West
Town	Joda	~2.5 km N
Highway	Expressway No. 2 NH-215	Expressway No. 2 passes through ML area NH-520: ~6.8 Km N
Interstate Boundary	Odisha-Jharkhand	~15.2 km, NE
Railway Station/line	Jalhari	~0.7 km W of ML
	SE-Rly.'s Padapahar Jn.- Banspani – Keonjhar – Jakhapura Jn. B.G. Main Line passes through ML	
Water body	DalkoNala Baitarani River	Flows from W to E through approx. Middle of ML area ~0.5 km, E
Monument	None within 15 km	

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Area/ Environmental Zone	Land/Protected Sensitivity	Yes/No	Details of Certificate/letter/Remarks
Forest Land		Yes	An area of 392.289 ha of forest land lies within mine lease area. Stage II FC obtained vide Lr No F.No-8-49/98FC(pt) dated 8 th October 2014 for an area of 342.602 ha of forest land. An application for diversion of balance area of 22.697 ha of forest land has been submitted vide proposal no. FP/OR/MIN/142115/2021 dated 08.05.2021. Compliance to the ADS sought by MoEFCC during scrutiny of Stage-I FC compliance

		is under recommendation process by State Forest Dept. Net Present Value (NPV) of the Forest amounting to Rs. 27,71,46,750/- has been paid.
National park	No	Nil within 10 km radius
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	
Wildlife corridor, migration route etc.	No	Karo-Karampada Elephant corridor: ~18 km, NW
Schedule-I Species	Yes	Indian Elephant, Sloth-bear & Mouse Deer as per the list authenticated by DFO Keonjhar Division.
Wildlife Conservation Plan	Yes	Site-Specific Conservation Plan has been prepared and approved by the PCCF (WL) vide letter No.10895 dt.15.12.2010. Total financial out lay: Rs.412.00 lakhs .

xii. Green belt/plantation details:

Proposed area for green belt/plantation	183.718 ha at Conceptual Stage
Budget for green plant& plantation till the end of life of mine.	Rs 4,54,50,000/- (Rupees Four Crore Fifty Four Lakhs Fifty Thousand Only)
Budget for nursery	Nil as plantation will be outsourced to Odisha State Forest Development Corporation (a Govt. of Odisha entity) who has their own nurseries.
7.5 m barrier & non-mineralized zone	83.0191 ha (40.696 ha over external dumps + 39.5539 ha mineral storage area + 2.7692 ha mineral processing area)
50 m safety zone of nallah, roads, electric lines	Included in above
500 m safety zones of nearest habitation villages	-
Additional information (if any)	Plantations over an area of 1.91 ha of exhausted quarry benches & backfilled areas

xiii. Baseline details:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	01-10-2021 to 31-12-2021
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-Monsoon Season
Predominant Wind direction (From)	West
Ambient Air Quality (no. of locations) and results	No. of Location Parameters Results 9 PM10 44.0 to 95.0 mg/m³ PM2.5 27.0 to 55.0 mg/m³ SO2

	4.0 to 10.2 mg/m³ NO₂ 10.3 to 22.0 mg/m³ CO 0.087 to 1.654 mg/m³	
Noise level (no. of locations) and results	Parameters Results During Day Time [Leq dB(A)] During Night Time [Leq dB(A)]	No. of Location 08 38.1 to 56.4 37.1 to 45.8
Water Quality (no. of locations) and results	Ground water quality Parameters Results pH TDS (mg/l) Fluoride (mg/l) Chloride (mg/l) Fe (mg/l) Surface Water Quality Parameters	No. of Location 06 6.71 to 7.08 54 to 306 0.1 to 0.24 13.5 to 61.7 0.05 to 1.96 No. of Location

	Results 06 pH 6.94 to 7.26 DO (mg/l) 5.6 to 6.8 BOD (mg/l) 2.0 to 3.0 Total Coliform (MPN/100 ml) 1000 – 1700	
Soil Quality (no. of locations) and results	No. of Location Parameters Results 06 pH 5.67 to 7.62 Electrical Conductivity ($\mu\text{S}/\text{cm}$) 49.7 to 254 Organic Matter (%) 0.84 to 5.91 Available Nitrogen (kg/ha) 50 to 188 Available Phosphorus (kg/ha) 0.2 to 3.1 Available Potassium (kg/ha) 98 to 476	
Traffic study (no. of locations) and results	The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs (see Table 3.53.2 in Chapter 3). It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck =	

	3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume. The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs. It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck = 3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume.

xiv. Public Hearing (PH) Details:

Advertisement for PH with date	- English daily newspaper: "The New Indian Express", Bhubaneswar edition dated 06 April, 2023 - Odiya daily newspaper: "The Pragatvadi", Bhubaneswar edition dated 06 April, 2023
Date of PH	09 th May, 2023
Venue	Jalahari Mouza (Khata No. 34, Plot Nos. 253, 254 & 253/431), Barbil Tehsil, Keonjhar District
Chaired by	Shri Jadumani Mahala, OAS, (SAG), Addl. District Magistrate (Revenue), Keonjhar
Main issues raised during PH	1. Employment 2. Supply of clean drinking water 3. Improvement in education facilities and infrastructure 4. Improvement in health care delivery systems 5. Air pollution and diseases due to air pollution 6. Poor conditions of roads 7. Need for support to Self Help Groups (SHGs)
Budget proposed for addressing issues raised during PH	Rs. 1865.582 Lakhs (To be spent over 3 years)
Additional information (if any)	Meeting attended by 482 persons including 328 persons from the Core Zone Villages. 39 persons (37 from the Core Zone villages). 33 written representations also have been received.

xv. Details of CTE, CTO, Certified Compliance Report and Past production details:-

Consent to Establish (CTE)	Odisha State Pollution Control Board granted the Consent to Establish vide order dated 09.08.2018 in favour of M/s Essel Mining and Industries Limited.
Consent to Operate (CTO)	Odisha State Pollution Control Board granted the Consent to Operate vide order dated 31.03.2022 for production of Iron Ore (ROM) 6.28 MTPA and the consent order is valid for the period 01.04.2022 to 31.03.2023 in favour of M/s OMC Ltd.
Certified Compliance Report (CCR)	Certified Compliance report issued by the Regional Office, MoEF&CC vide F.No: 101-420/23/EPE dated 09.08.2023 for the EC dated 07.06.2012. Site visit was conducted on 07.07.2023.
Past production	Certified production details issued by the Dy. Director of Mines vide Lr.Memo No: 2265/Mines, dated 18.05.2021 for the period 1994-95 to 2022-23. Year of Production EC sanctioned capacity (t) Actual Production (t) Excess Production beyond the EC sanctioned capacity

	1993-94
	-
	-
	-
	1994-95
	-
	442127
	-
	1995-96
	-
	555942
	-
	1996-97
	-
	622305
	-
	1997-98
	-
	922181
	-
	1998-99
	-
	934156
	-
	1999-00
	-
	819426
	-
	2000 – 01
	-

	1277927
	-
	2001 – 02
	-
	1613107
	-
	2002 – 03
	-
	1967094
	-
	2003 – 04
	-
	2054898
	-
	2004 – 05
	-
	3378059
	-
	2005 – 06
	4200000
	3856454
	-
	2006 – 07
	4200000
	3460258
	-
	2007 – 08
	4200000
	3997499
	-

	2008 – 09
	4200000
	4599848
	399848
	2009 – 10
	4200000
	4224984
	24984
	2010 - 11
	4200000
	2947756
	0
	2011 - 12
	4200000
	172558
	0
	2012 - 13
	6280000
	2306742
	0
	2013 - 14
	6280000
	2683497
	0
	2014 - 15
	6280000
	0
	0
	2015 - 16
	6280000

	0
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	6280000
	447629
	0
	2018- 19
	6280000
	6271381
	0
	2019 - 20
	6280000
	6268396
	0
	2020 - 21
	6280000
	196350
	0
	2021 - 22
	6280000
	5653000
	0
	2022 - 23
	6280000
	6280000
	0

Compliance of Hon'ble Supreme Court order dated 02.08.2017	A request letter was submitted by OMC to Jt. Director of Mines, Joda, Dept. of Steel & Mines with a request to duly authenticate the production figures since inception of mine and to provide the details of demand served to the ex-lessee, if any, for the Ores/Minerals raised in excess of the approved quantity with respect to EC for violation of EP Act, 1986 and violation of Mining Plan and CTO pertaining to Jilling-Langalotta Iron Ore Mining Project. In response to the above, Joint Director Mines, Joda, District Keonjhar vide letter dated 30.12.2021 has provided the certificate regarding payment towards compensation for excess production made by Ex-lessee. Details of Demand Notices and Status-Common Cause Judgement <table><thead><tr><th>S.No</th><th>Demand Notice</th><th>Amount</th></tr></thead><tbody><tr><td>1</td><td>EC Demand Notice No. 4040/ Mines dt.02.09.2017 Rs.641,2432,386/-</td><td></td></tr><tr><td>2</td><td>FC Demand Notice No.6375/Mines, dt. 26. 12.2017 Rs.1056,05,98,961/-</td><td></td></tr><tr><td>3</td><td>MP/CTO Demand Notice No.3862/Mines, dt. 19.09.2018 Rs. 128,12,05,207/-</td><td></td></tr></tbody></table> As per records available, M/s. Essel Mining & Industries Ltd, had deposited a total of Rs. 1825,87,36,554/- towards the compensation amount in the designated bank account as directed by the Hon'ble Supreme Court vide order W.P. (C) No. 114/2014 (Common Cause) dated 02.08.2017. Further, OMC started operating Jilling-Langalotta Mine with effect from 28-02-2021. Since then, no Environment & Forest related violation has been reported in respect of Jilling-Langalotta Iron Ore Mines. Project Proponent has submitted the Certificate from the Office of the Joint Director Mines Joda, Dist; Keonjhar vide No. 7304/Mines, dated 30.12.2021 certifying that the present lessee M/s Odisha Mining Corporation Limited is confined the mining activity within the granted and executed leasehold area.	S.No	Demand Notice	Amount	1	EC Demand Notice No. 4040/ Mines dt.02.09.2017 Rs.641,2432,386/-		2	FC Demand Notice No.6375/Mines, dt. 26. 12.2017 Rs.1056,05,98,961/-		3	MP/CTO Demand Notice No.3862/Mines, dt. 19.09.2018 Rs. 128,12,05,207/-		
S.No	Demand Notice	Amount												
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2	FC Demand Notice No.6375/Mines, dt. 26. 12.2017 Rs.1056,05,98,961/-													
3	MP/CTO Demand Notice No.3862/Mines, dt. 19.09.2018 Rs. 128,12,05,207/-													

	Project Proponent also submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no. M 054791 dated 09.07.2021 stating that the M/s OMC shall comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Others before grant of ToR/EC pertaining to Jilling-Langalota Iron Ore mining project.

xvi. Rehabilitation & Resettlement (R&R):

R & R details	Present proposal does not involve any land acquisition. There are some patches of private land within the ML area but these will not be acquired. Thus the project does not involve any R & R of land oustees.

xvii. Court case details:

Court Case	The Project Proponent submitted they do not have any litigation and also not received any court notice so far in respect of Jilling-Langalotta Mines after allotment of the mine to OMC.

xviii. Affidavit/Undertaking details:

Project Proponent submitted an Undertaking vide letter dated 09.08.2023	The Project Proponent has submitted an undertaking stating that the prescribed Terms of Reference has been complied while conducting the EIA Studies. The contents (information and data) as given by the Consultant in the EIA/EMP report are factually correct with full knowledge.
Consultant submitted an Undertaking vide letter dated 10.08.2023	The EIA/EMP report has been prepared as per ToR prescribed by MoEF&CC vide ToR letter dated 04.08.2021 and amended ToR letter dated 28.11.2022 based on baseline environmental data monitored by Environmental Engineering Laboratory, MECON Limited (CPCB recognized Laboratory) during Post-Monsoon Season 2021 and ToR prescribed for above mentioned project has been complied while conducting the EIA-EMP studies and the data submitted is factually correct.

xix. Details of the Environmental Management Plan (EMP):

Activities	Recurring cost (Lakhs Rs./yr)	Capital cost (Lakhs Rs.)
Pollution control	45	423 ^a
Pollution monitoring (laboratory)& CAAQMS	42 ^b	400
Occupational safety	50 ^c	20 ^d
Green belt & plantation at safety zone	-	454.5 ^e
Net Present Value(NPV) of Forest	-	2771.47
Compensatory Afforestation	-	61.995
Wildlife Conservation	6.55 ^g	346.50 ^f
Socio-economic welfare measures in nearby villages (CSR budget)	57.51 ^h	-
Budget for addressing Public Hearing commitments (erstwhile known as CER)	-	1865.58 ⁱ
Total	201.06	~6343.045

Note:

a = Surface drainage (garland drains, settlement pits, retaining wall etc.) + dust suppression system.

b = Cost for EMC (Environmental monitoring work is outsourced to accredited labs)& AMC of CAAQMS installed

c = Cost towards routine medical examinations, training & awareness
d = Cost of safety appliances procurement
e = On Basis of costs prevailing in 2022 – 23.
f = To be deposited with Divisional Forest Officer
g = Rs. 65.5 Lakhs to be spent over 10 years
h = Budget for 2022-23. Likely to be revised every year.
i = This money will be spent over a period of three years

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP)	EMP Capital Cost: Rs.44.77 Crores
Project Cost	Rs.431 Crores
Employment	488 Nos.

3.2.3. Deliberations by the EAC in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The Project Proponent and the Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and also the active quarries i.e., on the north western side and other one in southern side in the mine lease area. One Quarry i.e., Khuntapani was exhausted. A private railway siding is located on the north western side to dispatch the material. Backfilling has been started in the center quarry of the mine lease area. Some part of the area in the north eastern side has been taken by the State Govt for supply of water to the Joda Town. A small township is located within the mine lease area. There is a small stream (Dalko Nallah) passing from west to east in the mine lease area which is joining the Baitarani River located at a distance of about 0.5 km on the eastern side of the mine lease area. Adequate safety zone of about 13 ha will be maintained all along the nallah. No proposal to divert Dalko Nallah. NH-520 is located about 7km from the mine lease area. Other mines such as Tata Steel Ltd is located on the northern side of the mine lease area and Rungta Mines is located on the southern side of the mine lease area.

The Project Proponent has briefed about the chronology of the auction of the mine lease area. The Transfer of EC has been obtained in the name of M/s Odisha Mining Corporation Ltd and due to technical error in Parivesh portal the same could not able to download. In the instant proposal, there is no proposal for setting up of beneficiation plant in the mine lease area. The Project Proponent has informed the EAC that the total mine lease area is 456.037 ha (as per DGPS Survey), out of which 42.001 Ha is a Pvt land, 329.289 ha is a Forest land and 392.289 ha is a non-forest land. Stage II FC has been obtained vide letter dated 8th October 2014 for diversion of forest land of 342.602 ha in the name of M/s Essel Mining & Industries Ltd. Transfer of FC is under process with the State Govt. An application for diversion of balance area of 22.697 ha of forest land has been submitted vide proposal no. FP/OR/MIN/142115/2021 dated 08.05.2021 and is under process. Life of the mine is 8 years and is likely to increase with updation of reserves by further exploration. All mineral rejects, generated during the residual life of mine will be blended with high quality iron ore & sold out. The mineral dispatch is carried out at least 70% through rail from pvt. sidings within mine lease and balance 30% by road. No R&R involved in this proposal.

The Project Proponent has informed the EAC that there is no wildlife corridor and migration route within the study area. Karo-Karampada Elephant corridor is located at a distance of about 18 km on the North Western side and there is no movement of elephants in the study area. The EAC not convinced with the statement of the Project Proponent. The Project Proponent has informed the EAC that there is only occasional movement of elephants in the study area and it is not a habitat of elephants. Site-Specific Conservation Plan has been approved by the PCCF (WL) in the year 2010. The implementation status is under process. Long term regional level elephant management plan by Wildlife Institute of India is also under process. The EAC noted that National Highway also have specific elephants crossing area in Odisha. The EAC was of the view that the linear barriers created for movement of elephants and habitat use needs to be properly addressed in terms of scientific management and a plan for movement of elephants from one forest to the other forest area shall be included in the conservation plan. The EAC asked the Project Proponent to submit the activities proposed under Wildlife Conservation Plan along with the budget.

The EAC asked the Project Proponent that whether the quality of surface water is being monitored at Baitarani River during the monsoon. The Project Proponent has informed the EAC that the quality of surface water is being monitored regularly and submitted to the State Pollution Control Board. The Project Proponent has shown the retaining wall and garland drain around OB dump. The EAC opined that the Project Proponent needs to strengthen the garland drain. The EAC asked the Project Proponent whether railway line passing through the mine lease area or not. The Padapahar Jn. – Joda – Kendujhargarh - Jakhapura Railway Line passes through the ML area occupying 34.967 ha area. This includes 26.990 ha of Forest Land. Indian Railways had taken separate permission for construction of this Railway Line. OMC's existing operations are beyond this railway corridor and the status quo shall be maintained.

The Project Proponent has informed the EAC that the Joint Director of Mines, Joda, District Keonjhar vide letter dated 30.12.2021 has provided the certificate regarding payment towards compensation for excess production made by Ex-lessee. As per records available, M/s. Essel Mining & Industries Ltd, had deposited a total of Rs. 1825,87,36,554/- towards the compensation amount in the designated bank account as directed by the Hon'ble Supreme Court vide order W.P. (C) No. 114/2014 (Common Cause) dated 02.08.2017. Project Proponent also informed the EAC that M/s OMC started operating Jilling-Langalotta Mine with effect from 28-02-2021. Since then, no Environment & Forest related violation has been reported in respect of Jilling-Langalotta Iron Ore Mines. Further, the Project Proponent has informed the EAC that a Certificate has been obtained from the Office of the Joint Director Mines Joda, Dist; Keonjhar vide letter dated 30.12.2021 certifying that the present lessee M/s Odisha Mining Corporation Limited is confined the mining activity within the granted and executed leasehold area.

The Project Proponent has shown the Certified Compliance report issued by the Regional Office (RO), MoEF&CC vide letter dated 09.08.2023 for the EC dated 07.06.2012. Site visit was conducted on 07.07.2023. Regional Office has mentioned that the greenbelt development may be increased, reclamation of backfilled area with vegetation may be initiated and density of plantation may be increased. The EAC asked the Project Proponent whether the action taken report has been submitted to the Regional Office or not. The Project Proponent has informed the EAC that they will submit the action taken report. The EAC also asked the Project Proponent to clarify whether any court case/litigation pending against the previous lessee w.r.t temporary working permit and whether the same has been transferred to M/s Odisha Mining Corporation Ltd or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the action plan for strengthening the garland drains including their dimensions along with the timeline.
- ii. The EAC was of the view that the linear barriers created for movement of elephants and habitat use needs to be properly addressed in terms of scientific management and a plan for movement of elephants from one forest to the other forest area shall be included in the conservation plan. Accordingly, the Project Proponent needs to submit the activities proposed under Wildlife Conservation Plan along with the budget.
- iii. The Project Proponent needs to submit the action taken report for the non-compliances identified by the Regional Office.
- iv. The Project Proponent needs to submit the treatment methods to eliminate iron in groundwater so as to make it fit for drinking purpose.
- v. The Project Proponent needs to clarify whether any court case/litigation pending against the previous lessee w.r.t temporary working permit and whether the same has been transferred to M/s Odisha Mining Corporation Ltd or not.
- vi. The Project Proponent should submit measures taken to prevent contaminated water meeting Baitarani river.
- vii. The Project Proponent needs to submit the action plan for effective dust suppression system near haul roads and crushers with a provision for installation of online dust monitoring system.

3.2.5. Recommendation of EAC

Deferred for ADS

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

“Ball Clay, Fire clay, Red & Yellow ochre” Mining Project, M.L. No. 21/2004 by DEEPAK MINERAL BIKANER located at BIKANER, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/435186/2023	J-11015/269/2005-IA.II(M)	18/08/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

1. The instant proposal of M/s Deepak Mineral Industries is for mining of Ball Clay, Fire Clay, Red & Yellow Ochre Mine with enhancement in production capacity of Ball Clay from 20,000 TPA to 5,35,880 TPA (ROM) (Overburden: 2,35,880 TPA, Marketable mineral: 2,70,000 TPA, Mineral Waste: 30,000 TPA) in the mining lease area of 69.59 ha, located near Village Sarah Kishnayal, Tehsil- Kolayat, District Bikaner, Rajasthan.

3.3.3. Deliberations by the EAC in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The Project Proponent informed the EAC that the instant proposal was earlier considered in the EAC meeting held during 14-15 May, 2018 and the Ministry informed the Committee that PP had enhanced the production capacity without EC and in light of the Common Cause Judgment pronounced by the Hon'ble Supreme Court on dated 02.08.2017 this is a case of violation. The Committee, therefore, deferred the proposal noting that a separate Committee has been constituted for dealing with the projects involving violation of EPA, 1986 vide notification issued by the Ministry on 14.03.2017.

The EAC noted that the Project Proponent has submitted the fresh proposal for grant of Terms of Reference. The EAC asked the Project Proponent that whether the proposal submitted during the year 2018 and at present is same or different or whether there is a change in the scope or not? The Project Proponent has informed the EAC that during the year 2018, the proposal for Terms of Reference (ToR) was submitted for enhancement of production capacity from 20,000 TPA to 3,00,000 TPA (ROM) and now the proposal has been submitted for enhancement in production capacity of Ball Clay from 20,000 TPA to 5,35,880 TPA (ROM). The Project Proponent also informed the EAC that difference is that earlier Overburden: 2,35,880 TPA was not included in the proposal and now the same has been included. The EAC was of the view that there is a change in the scope of the proposal and hence the instant proposal shall be treated as fresh proposal. The EAC asked that the Project Proponent to submit the proposal to the SEIAA, Rajasthan as per the provisions of EIA Notification, 2006 and its subsequent amendments.

Then, the Project Proponent vide email dated 22.09.2023 informed that as per Ministry's Notification no S.O No. 3977(E) dated 14th August 2018, the proposal was already submitted to SEIAA, Rajasthan vide online proposal no: SIA/RJ/MIN/29973/2018 dated 24th Nov 2018 and the proposal was considered in the SEAC meeting held during 1-4 July, 2019 wherein the SEAC has noted that the Project Proponent has not submitted original record of the MoEF& CC pertaining to the project. The SEAC considered the matter in its 4.15th meeting held on 04.07.2019 and resolved to ask the PP again, to bring original report of the MoEF&CC. In this regard, the Project Proponent vide email dated 22.09.2023 requested the Ministry to transfer the old project file to SEIAA, Rajasthan. Based on the request of the Project Proponent, the EAC opined that the Ministry may transfer the old project file to SEIAA, Rajasthan as per the provisions of EIA Notification, 2006 and its subsequent amendments. Therefore, the EAC **returned the proposal in present form.**

3.3.5. Recommendation of EAC

Returned in present form

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Majhgawan Diamond Mine of M/s. NMDC Ltd with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] within the mine lease area of 113.332 Ha (Main Lease) Located at Majhgawan, Tehsil & District Panna, Madhya Pradesh by NMDC LIMITED located at PANNA,MADHYA PRADESH			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/442288/2023	J-11015/120/2018-IA-II(M)	02/09/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

The instant proposal is for mining of Diamond in Majhgawan Diamond Mine with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] in the mine lease area of 113.332 Ha (Main Lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh.

3.4.3. Deliberations by the EAC in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that "any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area".

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- ii. The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- iii. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

3.4.5. Recommendation of EAC

Deferred for ADS

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Amendment /Revalidation of EC w.r.t specific condition No (I) of EC dated 31.08.2020 in Kakra- Panna Limestone Mine (ML Area 1594.34 ha), located at Villages Kakra, Kamtana, Judi, Devra, Devri Purohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh proposed by M/s Jaykaycem Central Limited. by JAYKAYCEM CENTRAL LIMITED located at PANNA,MADHYA PRADESH			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/435272/2023	J-11015/190/2016-IA.II(M)	01/07/2023	Mining of minerals (1(a))

3.5.2. Project Salient Features

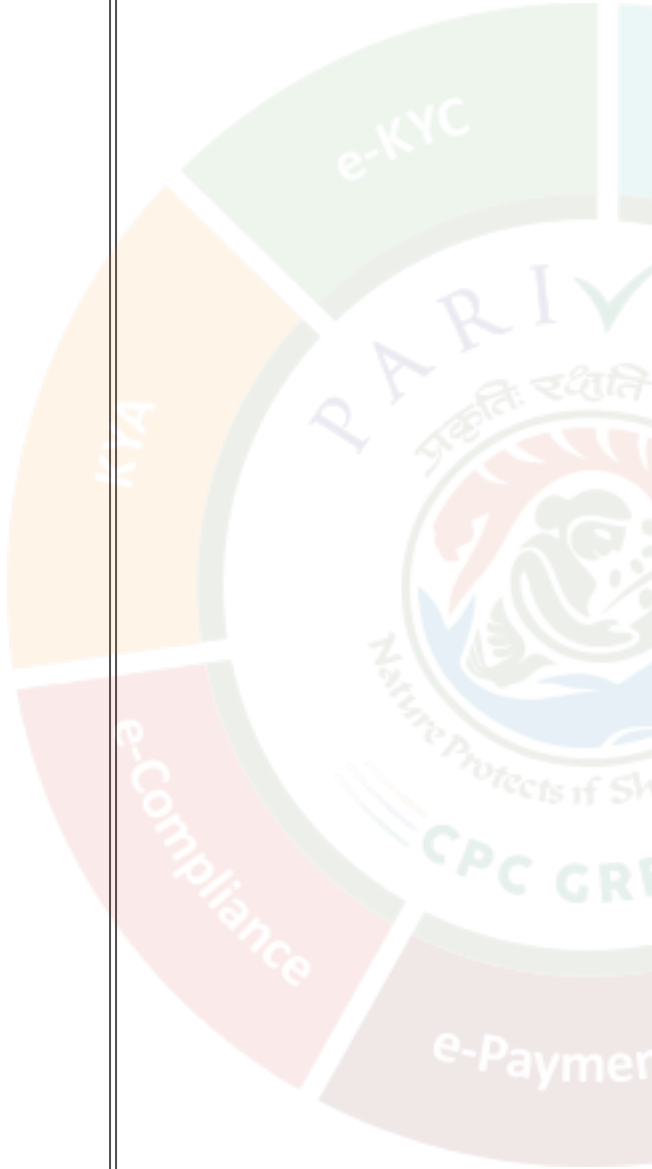
1. The instant proposal is for amendment in EC dated 31.08.2020 w.r.t specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh.
2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:
 - i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at the Central level.
 - ii. Initially, the Project Proponent has obtained Environmental Clearance (EC) on 31.08.2020 for mining of Limestone in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh. One of the specific condition (I) stipulated by EAC is that “Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”.

iii. Now, the Project Proponent requested to waive off the specific condition no: (I) and requested to allow the mining in the entire mine lease area of 1594.34 ha as per the approved Modified Mining Plan.

iv. The proposal was earlier considered in the 18th EAC (Non-Coal Mining) meeting held during 31st July & 1st August, 2023 wherein the EAC deferred the proposal for want of additional information. Then, the Project Proponent submitted the information on 25.08.2023 in Parivesh portal and accordingly the proposal was again reconsidered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023.

Based on observation of EAC in its EAC meeting held during 31st July & 1st August, 2023 and compliance of observation of EAC made by PP are detailed below:

S. No	Observation of EAC in its meeting held during 31 st July & 1 st August, 2023	Reply by Project Proponent
1	The Project Proponent needs to give proper justification for amendment in EC with clear picture of sequence of mining, plan for backfilling and details of the land acquired and to be acquired in the villages for mining and location to access.	The Project Proponent has submitted that the EC was granted on 31.08.2020 with a specific condition stating that the “Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”. Accordingly, Mining Plan has been modified and approved on 19th June, 2023 with change of mining sequence to avoid the void in West side of Dewra Village. As on date, an area of 360.66 ha of land has been purchased, Surface right has been granted for mining on Govt. land over an area of 75.754 ha, hence, total land under possession is 436.414 ha. The balance of 1157.926 ha is under purchase as per the mining activities progress. Now, the mining has to be done as per the approved Modified Mining Plan and in the Modified Mining Plan, the mining has to be done near Dewra Village so that void is avoided on West side of Dewra Village which was the requirement of EC. As per the earlier Mining Plan, the backfilling was proposed near Village Judi from the 2nd five year. Now, as per the Modified Mining Plan, the backfilling is proposed from 2nd five year in West Side of Dewra and Judi. The backfilling plan also indicates that at the conceptual stage, both sides of the Village Dewra were surrounded by water reservoir and now in modified backfilling plan, the entire surrounding of the Dewra Village has been reclaimed and covered by Greenbelt/ Plantation. In the view of the fact that the Specific Condition 1 has been complied with and mining is to be done as per the Approved Modified Mining Plan. Therefore, mining may be allowed as per the Modified Mining Plan.
2	The Project proponent needs to submit the comparison of sequence of mining in earlier mining plan and modified mining plan with detailed note and colour coding map.	The Project Proponent has submitted that initially, mining plan was approved in the year 2015 having proposed 1 st five year working near village Judi and 7 th , 8 th , 9 th & 10 th five year plans on the west of Dewra village with the proposal of creating water reservoirs in the mined out area at conceptual stage. At the time of EC appraisal, 235 ha land was under Company's acquisition and mining was restricted in 235 ha (available land at the time of EC) near Judi village. However, the 235 ha land was not in a continuous

		Block. As the land purchase is done in a progressive manner, as on date, the company is having total 436.414 haü(360.66 ha purchased and Surface right for mining on Govt. land of 75.754 ha) land under possession. Accordingly, the mining sequence has been modified and Modified Mining Plan has been approved by IBM, Jabalpur vide letter no. E 6699 MCDR-MPC0LST/15/2023-JBP-IBM_ RO_ JBP on dated 19th June, 2023. Now, the mining is to be done as per Modified Plan. In the conceptual plan of the Modified mining plan, mining is proposed in the 1st, 2nd& 11th five-year plan in the area falling on west side of Dewra village with backfilling starting from the 2nd five-year plan period to get it reclaimed and restored at the earliest to avoid the voids. The Project Proponent also submitted the map showing the status of the land such as purchased land, restricted land and Govt. land to be applied. Further, the Project Proponent also submitted the Progressive Mine Closure Plan and Conceptual Plan submitted at the time of EC appraisal and as per the Modified Mining Plan. The Project Proponent also submitted that to substantiate the requirement of backfilling material i.e. OB Soil and Waste rock, mining is proposed at 3 locations i.e. Block-A near Judi Village, Block-B on the west of Dewra Village and mine development at Block-C on the south of Dewra village having about 27 m thickness of OB Soil and waste rock above the limestone band of 26 m thickness. With the change in mining sequence, total volume excavated in Block-B is 2.45 million cu.m for removal of OB soil (2 m) & Limestone (18 m) and the quantity of backfilling material available from Block - C from 2nd Five-year plan is 3.32 million cu.m which is required to be mined out to expose limestone band in Block C for ensuring scientific & systematic mining with focus on mineral conservation. With the change in mining sequence, EC specific condition 1 shall be complied at the earliest period as well as waste rock shall be effectively utilized for backfilling which will also reduce requirement of large no. of OB/waste dumps. The distance of mining area from the earlier proposed location for 1st five-year plan period is about 5.0 km from crusher located inside ML area near plant boundary. The limestone transportation may have impact on habitation at three locations of village Dewra. To ensure least impact from the start of mining activities the modified mining plan was submitted and approved by IBM, Jabalpur on 19th June, 2023 and now the majority of mining is proposed in Block-B on west of Dewra village (about 75% quantity) having lead distance of 1.5 km. This will also support cement manufacturing process with optimum blend of limestone

		quality and mineral conservation. Mining Plan has been modified and approved on 19th June, 2023 with change of mining sequence to avoid the void in West side of Dewra Village. Now, the mining has to be done as per the Approved Modified Mining Plan and in the Modified Mining Plan, the mining has to be done near Dewra Village so that void is avoided on West side of Dewra Village which was the concern of the EAC. In the view of the fact that the Specific Condition 1 has been complied with and mining is to be done as per the Modified Mining Plan. Therefore, mining may be allowed as per the Modified Mining Plan. Further, the Project Proponent also submitted the year wise development plan submitted at the time of EC appraisal and as per the Modified Mining Plan.	
3	The Project Proponent needs to ensure whether the tiger corridors/dispersal routes are passing through the study area or not as per the Integrated Landscape Management Plan for Greater Panna Landscape form the Chief Wildlife Warden, MP.	The Project Proponent has submitted that the distance of mine site from buffer zone of Panna Tiger Reserve is 12.94 km. Letter regarding the same has been received from CCF, Bhopal (Madhya Pradesh) on 15.06.2020. The Project Proponent also submitted that a letter has been obtained from DFO (South Panna), Madhya Pradesh on 11.08.2023 stating that “Currently, Integrated Landscape Management Plan Greater Panna is not notified”.	
4	The Project Proponent needs to submit the compliance of the Wildlife Conservation Plan and their implementation status along with the proof of payments made to the State Forest Dept w.r.t approval of Wildlife Conservation Plan dated 13.12.2019.	The Project Proponent has submitted that the Wildlife Conservation Plan has been modified as per the recommendations to incorporate the revised financial outlay and the same has been submitted to the Forest Department. Further, the Company has deposited 100% amount; Rs. 289 Lakhs/- proposed for 10-year budget on 19 th August, 2023. PP also submitted the copy of acknowledgement receipt for amount paid along with the copy of approved Wildlife Conservation Plan.	
5	The EAC wanted to know the documentary proof for the required acquisition of additional land. Hence, the Project Proponent needs to submit the land possession certificate for an area of 436.414 ha.	The Project Proponent has submitted that the break-up of 436.414 ha of land, i.e., out of 436.414 ha; an area of 360.66 ha is a Private land and remaining area of 75.754 ha is a Government land. Out of 360.66 ha of Private land, an area of 288.1 ha land has been transferred in the name of M/s Jaykaycem (Central) Limited and transfer of remaining area of 72.56 ha is under in Company's name is under process.	

v. The Project Proponent has submitted that the Mining Plan has been modified and approved by Indian Bureau of Mines vide Letter No: E 6699 MCDRMPC0LST/15/2023-JBP-IBM_RO_JBP dated 19.06.2023 with change of mining sequence to avoid the void in West side of Dewra Village. As on date, an area of 360.66 ha of land has been purchased and surface right has been granted over an area of 75.754 ha of Govt. land for mining and thus total land under possession is 436.414 ha. The balance area of 1157.926 ha is under purchase as per the mining activities progress. Hence, in compliance of Specific Condition no I, the Project Proponent requested to allow the mining as per the approved Modified Mining Plan.

vi. The Project Proponent has submitted that there was no production done till 31st March, 2023. PP also submitted that there is no change in production capacity, land area, mining equipment and mining technology. All the declarations, undertakings, EIA/EMP report, Public hearing action plan submitted during detailed deliberations for earlier granted EC dated 31st August, 2020 are same as per the earlier proposal.

3.5.3. Deliberations by the EAC in previous meetings

Date of EAC 1 :31/07/2023

Deliberations of EAC 1 :

The Project Proponent/Consultant informed the EAC that the instant proposal is for amendment in EC dated 31.08.2020 w.r.t waive off the specific condition no: 1 of M/s Jaykaycem Central Limited in Kakra-Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, Amanganj Tehsil, District Panna, Madhya Pradesh. The specific condition (1) of EC dated 31.08.2020 states that *“Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”*.

The Project Proponent/Consultant has presented the KML file to indicate the site features in the study area. The Project Proponent also informed the EAC that there is no change in production capacity, mine lease area and method of mining. The mining operations started in the year 2023 only and till date only 165 Metric Tonnes of Limestone was excavated. The EAC asked the Project Proponent whether the instant mine lease falls under tiger dispersal route or not. The Project Proponent has informed the EAC that the instant mine lease does not fall in the tiger dispersal route.

The Project Proponent has informed the EAC that the Mining Plan has been modified and approved by Indian Bureau of Mines vide letter dated 19.06.2023 with change of mining sequence to avoid the void in West side of Dewra Village as per the specific condition no 1 as on date, an area of 360.66 ha of land has been purchased and Surface right has been obtained over an area of 75.754 ha of Govt. land for mining and thus the total land under possession is 436.414 ha. The balance area of 1157.926 ha is under purchase as per the mining activities progress. The Project Proponent has shown the earlier and proposed sequence of mining and their conceptual plans respectively. The sequence of mining has been changed and hence, in compliance of Specific Condition no 1, the Project Proponent requested to allow the mining as per the approved Modified Mining Plan and to waive off the specific condition no: 1.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the Project Proponent has submitted the approved modified plan showing the change in sequence of mining as advised by earlier committee. The EAC wanted to know whether the Project Proponent acquired the land as per the advice of earlier committee. The EAC also wanted to know the documentary proof for the required acquisition of additional land and the location to access. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to give proper justification for amendment in EC with clear picture of sequence of mining, plan for backfilling and details of the land acquired and to be acquired in the villages for mining and location to access.
- ii. The Project proponent needs to submit the comparison of sequence of mining in earlier mining plan and modified mining plan with detailed note and colour coding map.
- iii. The Project Proponent needs to ensure whether the tiger corridors/dispersal routes are passing through the study area or not as per the Integrated Landscape Management Plan for Greater Panna Landscape form the Chief Wildlife Warden, MP.
- iv. The Project Proponent needs to submit the compliance of the Wildlife Conservation Plan and their implementation status along with the proof of payments made to the State Forest Dept w.r.t approval of Wildlife Conservation Plan dated 13.12.2019.
- v. The EAC wanted to know the documentary proof for the required acquisition of additional land. Hence, the Project Proponent needs to submit the land possession certificate for an area of 436.414 ha.

3.5.4. Deliberations by the EAC in current meetings

The EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project Proponent has informed the EAC that initially EC was granted on 31.08.2020 wherein the specific condition (i) of EC dated 31.08.2020 states that the *“Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for revalidation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”*. Accordingly, Mining Plan has been modified and approved on 19.06.2023

with change of Mining sequence to avoid the void in West side of Dewra Village. As on date, an area of 360.66 ha of land has been purchased and surface right has been granted for mining on Govt. land of 75.754 ha and the total land under possession is 436.414 ha. The balance area of 1157.926 ha is under purchase as per the mining activities progress. Now, the mining activity has to be carried out as per the approved Modified Mining Plan. Accordingly mining has been proposed initially near Dewra Village so that backfilling can be started immediately in the mined-out pit to avoid any open void on the West side of Dewra Village, which was the suggestion of EAC and requirement of EC.

The Project Proponent also shown the comparison of progressive mine closure and conceptual plan as per earlier Mining Plan and Modified Mining Plan. The Project Proponent has informed the EAC that at the conceptual stage, water bodies on both the sides of the Dewra Village as per the earlier mining plan is now modified to be backfilled area/reclaimed area on both the sides of the Dewra Village in Modified Mining Plan. The additional acquired land falls in the 2nd five year working. The crusher area is located close to the Cement Plant. The Project Proponent informed the EAC that the distance of mine site from buffer zone of Panna Tiger Reserve is 12.94 km. Letter regarding the same has been received from CCF, Bhopal (Madhya Pradesh) on 15.06.2020. The Project Proponent also informed the EAC that a letter has been obtained from DFO (South Panna), Madhya Pradesh on 11.08.2023 stating that “*Currently, Integrated Landscape Management Plan Greater Panna is not notified*”. The Project Proponent has informed the EAC that the Wildlife Conservation Plan has been modified as per the recommendations to incorporate the revised financial outlay and submitted to the Forest Department. An amount of Rs 289.0 Lakhs has been deposited on 19.08.2023 and the Project Proponent has shown the Copy of acknowledgement receipt for amount paid along with approved Wildlife Conservation Plan.

The EAC noted that the Project Proponent has modified the mining sequence to avoid the void in west side of Dewra Village and accepted to waive off the specific condition no. (i). After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 21-22 September, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of amendment in Environmental Clearance dated 31.08.2020 to w.r.t waive off the specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh along with the following additional specific conditions:-

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Environment Conditions

3.5.6.1. Specific

Dust Suppression

1.	The Project Proponent needs to make provision for permanent water sprinklers so as to reduce the water consumption. Further, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. Online air monitoring system should be installed near crusher and haul roads to control dust generation during mining.

Single Use Plastic

1.	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

Clean Energy

1.	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

Greater Panna Landscape	
1.	The Project Proponent shall not transport the mineral through tiger dispersal route and it should be routed through other side without causing traffic, pollution and road kill in the tiger reserve area.
Greater Panna Landscape	
1.	Although the site is not located in any classified corridor, tigers move in the landscape randomly through the agriculture and open areas. Therefore, the Project Proponent should have site-specific assessment of tiger movement and shall ensure that there is no disturbance on the western area towards Ken River. Further, based on site assessment, local level mitigation plan shall be in place.
Greater Panna Landscape	
1.	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of Tigers in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for Tigers and to avoid Man-Animal conflict.
Greater Panna Landscape	
1.	Biodiversity management plan, including restoration and carbon offset scheme shall be included in the mine plan and operation.
Greater Panna Landscape	
1.	The project proponent needs to submit the quarterly compliance report to the State Forest Department/NTCA/RO w.r.t monitoring of the movement of tiger in the study area and their effectiveness of implementation of mitigation plan.
Skill Development	
1.	The Project Proponent needs to provide the apprenticeship to the local people. The data and the outcome should be maintained for the same imparted to the local people.
Miscellaneous	
1.	All other terms and conditions mentioned in the EC letter dated 31.08.2020 shall remain unchanged.

Day 2 -22/09/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

M/s Sai Balaji Minerals OBULAPURAM IRON ORE Mine(Violation) by SAI BALAJI MINERALS located at ANANTAPUR, ANDHRA PRADESH			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/AP/MIN/423323/2023	IA-J-11015/5/2023-IA-II(NCM)	05/09/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

1. The instant proposal is for mining of Iron Ore in Obulapuram Iron Ore Mine of M/s Sai Balaji Minerals with production capacity of Iron Ore: 99,789 Tons/Annum in the mine lease area of 4.003 ha, located at Sy.No: 370, Sy.No: 58/P Of Obulapuram Village, D-Hirehal Mandal, Anantapuram District, Andhra Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

i. The mine lease area is located between Latitude: 15°02'56.85605"N - 15°03' 09.41610"N and Longitude: 76°51'31.93150"E - 76°51'42.96087"E and falls under the Survey of India Toposheet No: 57 A/16 and falls in Seismic Zone-II.

ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the instant proposal attracts the general conditions as the Interstate boundary of Andhra Pradesh and Karnataka is located at a distance of 0.6 km from the mine lease area and appraised at the Central level.

iii. Details of Mine lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Grant of Mine Lease vide G.O Ms.No 158	20.06.2007	Iron Ore (Major Mineral)	20 years	Government of Andhra Pradesh	4.046 Ha – as per Lease 4.003 Ha – as per DGPS (10.0 Acres)

iv. Details of execution of mine lease:

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Proc: 3272/ML/07, Dated: 22.09.2007	22.09.2007	21.09.2027 (deemed extension upto 2057)	Iron Ore	4.046 Ha – as per Lease 4.003 Ha – as per DGPS

v. Land Use/Land Cover of the Mine Lease Area:

Private land	Nil
Government land	4.003
Forest land	Nil
Total Mining lease area (MLA), ha	4.003
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

vi. Mining plan details:

Review of Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	AP/ANP/MP/Iron ore-12/Hyd
	Date	23.08.2022
	Mineral & (Major/Minor)	Iron Ore – Major Mineral
	Mine Lease Area, Ha	4.046 Ha – as per Lease 4.003 Ha – as per DGPS Survey

	Validity	2026-27
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mining – Mechanized	
Drilling/Blasting	Yes	
Geological Reserves	1797225 tonnes	
Mineable Reserves	1195671 tonnes	
Life of mine	6 years	
Mine Bench Height & Bench Width	6 x 6	
No. of Mine Benches	Nil	
Existing Depth, m bgl	Nil	
Ultimate Depth of Mining, m bgl	4	
Ground Water Table, m bgl	60	
Details of ground water intersection	Nil	
Individual bench slope	45 ⁰	
Overall pit slope	60 ⁰	
Details of existing/ proposed Crusher	Nil	
Mineral Beneficiation	Nil	
RoM output size	Boulders	
Transportation details including capacity of dumper/tipper, mode of transport and distance	1. 2 Back Hoe/Excavator (0.9M ³) 2. 3 Dumpers (10tons capacity) 3. 1 Dozer (1.2 M ³)	
Generation of Topsoil/OB & its Management during plan period & conceptual period	Plan Period: Overburden: 272740 tons 1255 m ³ of topsoil will be generated	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	241145 m ³ of waste generated. 0.70 ha will used for Dumping as Approved mining plan.	

vii. Water requirement:

Total water requirement	10.0 KLD	Freshwater	10KLD
		Treated water	
Source	Initially, Groundwater till 5 years and later from rain water harvested from the excavated pits.		

viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Village	Obulapuram	2.1 km towards SSW
Town	D.Hirehal	5km towards SSW
Highway	NH-150A (Rampura- Bellary)	500m towards East
Interstate Boundary	AP-Karnataka	700m towards NE as per Toposheet
Railway Station/Railway line	Railway line (Bellary Rayadurga) SW Railway Line	470m towards East
Water Bodies	Tungabhadra High level canal Allipura Reservoir	1.2 km, E 11 km towards North
Forest	Bellary R.F	1.2 km, NW

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Not Applicable
National Park	No	Not Applicable
Wildlife Sanctuary	No	Not Applicable
Elephant/Tiger Reserve	No	Not Applicable
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	Not Applicable
Coastal Regulation Zone (CRZ)	No	Not Applicable
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	No	Not Applicable
Wildlife Conservation Plan	No	Not Applicable

x. Green belt/plantation details:

Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	0.840

xi. The Project Proponent has submitted the letter from the Office of the Department of Mines and Geology vide Lr.No: 3272/ML/2007 dated 08.12.2022 with regard to permitted quantity from the 2007-08 to 2022-23 as mentioned below: -

S. No	Year	Permitted quantity in MTs
1	2007-08	510
2	2008-09	5865
3	2009-10	29410
4	2010-11	96270
5	2011-12	76500
6	2012-13	19210
7	2013-14	12988
8	2014-15	2499
9	2015-16	27515
10	2016-17	69878
11	2017-18	0
12	2018-19	0
13	2019-20	6
14	2020-21	6524
15	2021-22	19750
16	2022-23 (08.12.2022)	0
	Total	366925

xii. If violation under SOP, dated 7th July, 2021. Point-Wise Compliance to SoP:

S. No.	SOP dated 07.07.2021	Compliance
1	S. No Status of EC Actions	Order to close its operation

	1 If no prior EC has been taken Order to close its operation 2 If prior EC is available for existing/old unit Order to revert the activity/ production to permissible limits 3 If prior EC was not required for earlier production level but is now required Restrict the activity/production to the extent to which prior EC was not required	
2	Action under Environment (Protection), Act 1986	The Ministry to initiate action under section 15 read with section 19 of the Environment (Protection) Act, 1986 against the Project Proponent
3	Appraisal under EIA Notification, 2006	As per Ministry's SOP dated 07.07.2021
4	Penalty Provisions for Violation Cases and applications 1. For new projects: 1. Where operation has not commenced: 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report; [Ex: Rs. 1 lakh for project cost of Rs 1 Cr] 1. Where operations have commenced without EC: 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report PLUS 0.25% of the total annual turnover during the period of violation. [Ex: For Rs. 100 Cr project cost and Rs.100 Cr total turnover, the penalty shall be Rs. 1 Cr + Rs 0.25 Cr = Rs 1.25 Cr]. 1. For expansion projects: 1. Where operation/ production with expanded capacity has not commenced: 1% of the total project cost attributable to the expansion, incurred up to the date of filing of application along with EIA/EMP report.	The penalty shall be decided during the time of appraisal for EC.

1. Where operation/ production with expanded capacity have commenced:

1% of the total project cost (attributable to the expansion activity), incurred up to the date of filing of application along with EIA/EMP report PLUS 0.25% of the total annual turnover (attributable to the expanded activity/capacity) involved during the period of violation.

xiii. The Project Proponent has submitted an Affidavit in a non-judicial stamp paper of Rs 100 dated 02.01.2023 stating that as on date, the instant mine does not have a valid EC. The Project Proponent also undertaken to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of Common Cause versus Union of India and Ors., before grant of Terms of Reference (ToR)/ Environmental Clearance (EC).

xiv. Rehabilitation & Resettlement (R&R): No R&R is involved.

xv. Court case details: No Court cases are pending.

xvi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	50 Lakhs
Employment (No.s)	30

3.1.3. Deliberations by the EAC in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The instant proposal attracts the general conditions as the Interstate boundary of Andhra Pradesh and Karnataka is located at a distance of 0.6 km from the mine lease area. The Project Proponent has informed the EAC that railway line is located at a distance of around 500m on the eastern side from the mine lease area. Nearest Village is Obulapuram and it is located at a distance of about 2.0 km from the mine lease area. The Project Proponent also showed the old working pits within the mine lease area in the KML file. The balance life of the mine is 6 years. No National Park, Wildlife Sanctuary, ESZ/ESA within 10 km of the mine lease area. The mined out material will be transported by road through NH at a distance of 40km to Jindal and nearby mini steel plants and sponge iron plants. No village is passing through the transportation route.

The Project Proponent has informed the EAC that the mine lease deed was executed on 22.09.2007 and is valid upto 21.09.2027. A proposal was submitted to SEIAA, Andhra Pradesh during the year 2017. The EAC asked the Project Proponent that what is the reason for applying for ToR in the year 2023 after a gap of 6 years. The Project Proponent has informed the EAC no permits were issued by the Mining Dept., and Indian Bureau of Mines (IBM) has directed to obtain EC. The Project Proponent also informed the EAC that the State Pollution Control Board has directed to submit the copy of EC while submitting the application for renewal for consent for operation.

The mine commenced its operation in the year 2007 as no Environmental Clearance was required for mining of major minerals less than 5 Ha as per EIA Notification, 2006. The mine was in operation from the year 2007-08 to 2021-22. The Project Proponent also informed the EAC that as on date mine is not in operation. By Suo moto, the Project Proponent accepted that instant proposal is a violation case. The Project Proponent has shown the certified production details from the year 2007-08 to 2021-22. The EAC observed that the Project Proponent has exceeded the production of the base year 1993-94 i.e., 510 MT from the year 2008-09 to 2016-17 and 2020-21 to 2021-22 and also the Project Proponent has been mining without EC. Thus the EAC opined that the instant proposal attracts the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors and violation of the EIA Notification, 2006. The EAC reiterated the Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006 stating that "the percentage rates

shall be halved if the project proponent suo-moto reports such violations without such violations coming to the knowledge of the Government either on inquiry or complaint". The EAC noted that as per Ministry's OM dated 07.07.2021, Clause 11: SOP for dealing with the violation cases if no prior EC has been taken then order to close its operation. In view of the above, the EAC asked the Ministry to close its operation and to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. The Project Proponent requested for exemption of public hearing as per Ministry's OM dated 12.11.2020. The EAC opined that the said OM does not applicable to this instant proposal.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 21-22 September 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein and as per Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Sai Balaji Minerals for mining of Iron Ore in Obulapuram Iron Ore Mine with production capacity of Iron Ore: 99,789 Tons/Annum in the mine lease area of 4.003 ha, located at Sy.No: 370, Sy.No: 58/P Of Obulapuram Village, D-Hirehal Mandal, Anantapuram District, Andhra Pradesh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

3.1.5. Recommendation of EAC

Recommended

3.1.6. Details of Terms of Reference

3.1.6.1. Specific

Environment Monitoring and EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, predominant downwind direction and at other sensitive receptors. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
Forest Department	
1.	The Project Proponent needs to submit the letter from the State Forest Dept of Andhra Pradesh and Karnataka regarding the distance of the location of the National Park, Wildlife Sanctuary, Tiger Reserves/ Tiger Corridor etc., along with the authenticated map and also the authenticated list of flora and fauna since the study area of the 10km radius of the buffer zone falling in the State of Andhra Pradesh and Karnataka (0.6 km).
Groundwater	
1.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
2.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
Railway line	
1.	The Project proponent needs to submit the map demarcating the railway line and railway boundary from the nearest working pit and the mine lease area.

Violation	
1.	The EAC asked the Ministry to close its operation and to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. Further, no consent to operate to be issued till the project is granted EC. The action initiated by the State Govt./State PCB, status of the same may be submitted to the Ministry.
2.	The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
3.	Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
4.	The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
5.	Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
6.	Details of benefit accrued during the violation period along with capital cost of the project needs to be submitted.
7.	The Project Proponent needs to submit the penalty provisions as per Ministry's SOP dated 07.07.2021 at the time of appraisal of EC.
Groundwater	
1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
MIscellaneous	
1.	The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.II(M) dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

3.1.6.2. Standard

1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production

	after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
Wildlife	
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any

	Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.

Baseline Environment

1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.

Water Environment

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

Hydro Geology

1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

Transportation	
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
Land Acquisition and R&R	
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
Socio-Economic Environment	
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
Environmental Monitoring and Management	
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
Critically Polluted Areas, Aravali & CRZ	

1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
Risk Assessment & Disaster Management	
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.
Miscellaneous	
1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Block 1- Bicholim Mineral Block for Iron Ore by VEDANTA LIMITED located at NORTH GOA,GOA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)

IA/GA/MIN/442593/2023	IA-J-11015/3/2023-IA-II(NCM)	01/09/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

1. The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

i. The mine lease area is located between Latitude: 15°34'20.518"N to 15° 36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.

ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.

iii. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
16.03.2023	F.No: IA-J-11015/3/2023-IA-II(NCM) IA/GA/MIN/422323/2023	3-4 May, 2023	Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa	16.06.2023

iv. Details of Mine Lease:

a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgoa Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

v. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

vi. Details of Mining Plan:

Review and Mining Plan approved by Indian Bureau of Mines, Goa	Letter No.	No. MCDR-MPC 1 2023-GOA-IBM_ RO_ GOA	
	Date	26.05.2023	
	Mine Lease Area	478.5206 Ha	
	Mineral	Iron Ore (Major Mineral)	
Mining Parameters	Quantitative Description		
Method of Mining	Opencast mechanized mining without Drilling & Blasting		
Drilling/Blasting	Not Applicable		
Total Reserves and Resources	84.73 Million Tonnes		
Proved Mineral Reserve	36.071 Million Tonnes		
Life of mine	30 years		
Bench Height	7 m		
Bench Width	10 m		
Individual bench slope	70 ⁰		
Overall pit slope	<26 ⁰		
RoM output size	Less than 500 mm		
Crushing/Screening	Mobile Dry Crushing and Screening plant shall be available within the proposed mine to handle 4 MTPA of crude ore. The primary crusher will consist of 1 no. of Jaw crusher of capacity 120 TPH with an input feed of -500mm and shall produce output of -70 mm. It shall be followed by secondary crushers, 2 no.s of capacity 300 TPH and 200 TPH respectively. The input feed size shall be -70mm and output feed size obtained shall be -40mm. The Screening Plants of capacity -600TPH shall be installed where input the feed size shall be -70mm to obtain product of -40mm lumps & -10mm fines.		
Transportation details	ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road.		
Dumpers capacity	40 tonne (within mines)		
Waste handling and Disposal	During the mining period, the waste generated by mining will be temporarily stacked within the mining lease area as surface dump and backfilled in the exhausted portion of the pits. The total waste to be generated during the plan period is about 69.85 million tonnes. An area of 6.7146 Ha shall be utilized for Dumps and Material stocking at the conceptual stage of mining.		

vii. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.		

viii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area

Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North
Water Bodies	Asnora River Mayem Lake Mandovi River	Touching lease boundary at one of the points 0.46 km 2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idgah Shri Lairae Temple	Within the lease area 0.86 km
Caves/Fort	300m buffer from Lamgao caves Khorjuvem Fort: 2 km	

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Area/Environmental Zone	Land/Protected Sensitivity	Yes/No	Details of Certificate/letter/Remarks
Forest Land		Yes	Mayem Forest Common Boundary with the mine lease area The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 km Kasarpal RF - 5.1 km Ambadgaon RF - 7.6 km
National Park/Wildlife Sanctuary, ESZ/ESA etc.,		No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/ 968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. 1. Madei Wild life Sanctuary-14.105 km, E 2. Salim Ali Bird Sanctuary -10.553 km, SW 3. Bondla Wildlife Sanctuary -20.476 km, SE The Project Proponent also submitted the letter dated 22.02.2023 obtained from the Director (Environment) & Member Secretary, Goa-SEIAA stating that the Authority on perusal of Draft Zonal Master Plan for Eco-Sensitive Zones of Goa 2022 noticed that Eco Sensitive Zones declared by the Ministry of Environment & Forest in the State of Goa covers six Talukas such as Sattari, Dharbandora, Ponda, Sanguem, Canacona and Quepem, Bicholim taluka is not included in Draft Zonal Plan and it is not part of Eco Sensitive Zones. It is also clarified that Block-I Bicholim Mineral Block of Vedanta Ltd is also not a part of any Eco Sensitive Area.
Schedule-I species		Yes	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: 5/FCA/GEN/F&F/DCFN/TECH/2022-23 dated 04.04.2023 with regard to list of Flora and Fauna species present in core and buffer zone. The following Schedule-I species are found in the study area such as 1 Common leopard (<i>Felidae</i>)

		2 White-bellied Sea-Eagle(<i>Accipitridae</i>) 3 Indian Peafowl (<i>Phasianidae</i>) 4 Crimson rose- Butterfly (<i>Papilionidae</i>)	
Status of Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023. PP has submitted the copy of the acknowledgement from Chief Wildlife Warden.	

x. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

xi. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)														
Period of baseline data collection	March, 2023 to May, 2023													
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season													
Ambient Air Quality (no. of locations) and results	<table><tr><td>No. of Locations</td></tr><tr><td>Parameters</td></tr><tr><td>Results</td></tr><tr><td>9</td></tr><tr><td>PM10</td></tr><tr><td>27.0 to 56.0 mg/m³</td></tr><tr><td>PM2.5</td></tr><tr><td>14.0 to 36.0 mg/m³</td></tr><tr><td>SO2</td></tr><tr><td>4.0 to 13.0 mg/m³</td></tr><tr><td>NO2</td></tr><tr><td><4.0 to 18.0 mg/m³</td></tr></table>	No. of Locations	Parameters	Results	9	PM10	27.0 to 56.0 mg/m ³	PM2.5	14.0 to 36.0 mg/m ³	SO2	4.0 to 13.0 mg/m ³	NO2	<4.0 to 18.0 mg/m ³	
No. of Locations														
Parameters														
Results														
9														
PM10														
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SO2														
4.0 to 13.0 mg/m ³														
NO2														
<4.0 to 18.0 mg/m ³														
Noise level (no. of locations) and results	<table><tr><td>No. of Locations</td></tr><tr><td>Parameters</td></tr><tr><td>Results</td></tr><tr><td>09</td></tr><tr><td>During Day Time [Leq dB(A)]</td></tr><tr><td>43.1 to 61.7</td></tr></table>	No. of Locations	Parameters	Results	09	During Day Time [Leq dB(A)]	43.1 to 61.7							
No. of Locations														
Parameters														
Results														
09														
During Day Time [Leq dB(A)]														
43.1 to 61.7														

	During Night Time [Leq dB(A)] 35.9 to 49.3	
Water Quality (no. of locations) and results	Surface water quality No. of Locations Parameters Results 07 pH 6.35 - 7.39 TDS (mg/l) 72 - 11240 Fluoride (mg/l) <0.1 Chloride (mg/l) 18 - 5620 Fe (mg/l) <0.05 Dissolved Oxygen (as O₂), mg/l 6.2 – 6.9 Biochemical Oxygen Demand (as O₂), mg/l <3.0 Chemical Oxygen Demand (COD) mg/l 22.0 – 26.0 Groundwater Quality No. of Locations Parameters Results 10 pH 5.63 – 7.07 TDS (mg/l)	

	20 – 150															
Fluoride (mg/l)	0.1															
Chloride (mg/l)	5.0 - 19.0															
Soil Quality (no. of locations) and results	<table><tr><td>Parameters</td><td>No. of Locations</td></tr><tr><td>Results</td><td>07</td></tr><tr><td>pH</td><td>5.38 to 5.78</td></tr><tr><td>Electrical Conductivity (mohs/cm)</td><td>0.28 to 0.318</td></tr><tr><td>Nitrogen (kg/ha)</td><td>200 to 275</td></tr><tr><td>Phosphorus (kg/ha)</td><td>14.3 to 17.8</td></tr><tr><td>Potassium (kg/ha)</td><td>230 to 263</td></tr></table>	Parameters	No. of Locations	Results	07	pH	5.38 to 5.78	Electrical Conductivity (mohs/cm)	0.28 to 0.318	Nitrogen (kg/ha)	200 to 275	Phosphorus (kg/ha)	14.3 to 17.8	Potassium (kg/ha)	230 to 263	
Parameters	No. of Locations															
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Nitrogen (kg/ha)	200 to 275															
Phosphorus (kg/ha)	14.3 to 17.8															
Potassium (kg/ha)	230 to 263															

xii. Public Hearing (PH) Details:

Advertisement for PH with date	07.07.2023 Regional: Bhangar Bhui, Herald, Lokmat & Free press journal (Mumbai Edition) News papers
Date of PH	11/08/2023
Venue	Narayan Zantye Multipurpose Sports Complex, Sarvan, Bicholim, Goa
Chaired by	District Collector, North Goa
Main issues raised during PH	Pollution, impact on ponds, Support for Education, Health, Agriculture Development & Skill Development, Employment.
Budget proposed for addressing issues raised during PH	Rs 309.3 Lakhs

xiii. Rehabilitation & Resettlement:

R & R details	There is presence of habitation within ML Area at Mulgao and lamgao villages. Safety

Buffer of 50m will be maintained from the habitations. No Rehabilitation & Resettlement Plan is proposed during life of mine.

xiv. Court case details:

Court Case	Yes
Additional information (if any)	<u>First Case (Suresh Zantye & ors. v. State of Goa & Ors.):</u> 1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extend it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order the matter has been disposed of by the HC on 17th July 2023 with a direction to the Petitioner to make a representation before the Government and the Government is to dispose of the same within four months. <u>Second Case (MSPL v. State of Goa & Ors.):</u> 1. WP 592 of 2022 2. The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to the extend it fails to include the essential facts and in the alternative to stay the auction. 3. Case status is pending 4. No adverse orders have been passed. 5. As per the last order the matter was listed on 01.09.2023. <u>Third Case (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors):</u> 1. PIL WP 2029/2023 (F) 2. PIL has been filed challenging state's decision to go ahead with the auction of the mining block. The said PIL also challenges the order dated 13.01.2023 which issues LOI to the successful bidder. The primary grievances of the petitioners are that village settlement are included within the mining blocks auctioned. Hence this PIL was preferred under Article 226 and 21 of the Constitution. Vedanta Limited is Respondent No. 3 in the aforementioned PIL. The matter is listed for first hearing on 25.09.23.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will comply to the directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking of Project Proponent	The Project Proponent has submitted an undertaking stating that the Environmental Impact Assessment Report of Block-1 Bicholim Mineral Block of M/s Vedanta Ltd was prepared by M/s Mineral Engineering Services, QCI/NABET Accredited EIA Consultant at Sr.No. 55 as per list of list of accredited consultant/organizations. The Project Proponent hereby undertaken that the information and data provided in the EIA report and submitted to the Ministry are factually correct and fully accountable for the same.
Consultant submitted an Undertaking vide letter dated 02.06.2023	This is to declare that the prescribed ToRs have been complied with and that the data submitted are factually correct in respect of EIA & EMP report prepared for Block-1 Bicholim Mineral Block of M/s Vedanta Ltd, Goa.

xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Plantation	-	7.5
Environment monitoring	44	44
Air pollution control measures	20	300
Water Treatment	-	11
Erosion control /monsoon measures	-	221
Personal protective equipment	-	15
Maintenance of fire protection systems	-	1.5
Environment awareness & training	-	5
Health	8	16
Total	72	621

xvii. Details of project cost and employment:

Particulars	(Rs. In lakhs)
Project Cost	25000 Lakhs
Employment	716 no.s

3.2.3. Deliberations by the EAC in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The Project Proponent and the Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and informed the EAC that there are two habitations such as Mulgao and Lumgao and schools are located within the mine lease area. Two schools are located in the Mulgao Village. One school is located at a distance of 138m from the Ultimate Pit Limit (UPL) and the other school is located at a distance of 190m from the Ultimate Pit Limit (UPL). No drilling and blasting is involved. Green barriers are maintained to prevent it from the environment hazards. Tributary of Asnora River is touching the mine lease area on the western side. It has been observed that area between river & bottom pit 5 is approximately 6m AMSL which obstructs the flow of water between them, even the high flood condition and at the place where river is touching the block boundary, it is 10.93m AMSL. Hence, even during high flood level, river will not interact with the pit water. The EAC noted that there are few temples, caves and fort are present in the vicinity of the mine lease area. There will be no surface dumping and will be backfilled concurrently and there are voids available for backfilling. Later on the Project Proponent has informed that the pits will be used as a settling ponds. The EAC noted that the Project Proponent is giving two contradictory statements. The EAC asked the Project Proponent to provide the design of the settling ponds in different pits.

The Project Proponent has informed the EAC that Block-I Bicholim block is an old mine and it was auctioned to Vedanta Ltd in the year 2022 and Letter of Intent (LoI) was granted on 13.01.2023. The EAC asked the Project Proponent that after the year 2018 whether any Environmental Clearance has been granted in the State of Goa. The Project Proponent has informed the EAC after the year 2018 there was no mining in Goa and this instant case is the first case for grant of Environmental Clearance. No forest land is involved in the mine lease area. The EAC noted that the Project Proponent has submitted that Mayem Forest common boundary is sharing with the mine lease area. The EAC was of the view that involvement of forest land within the mine lease area is not clear as there are two contradictory information given by the Project Proponent. The EAC also noted that in this regard, the Project Proponent has not submitted the letter from the Forest Dept. No National Park/Wildlife Sanctuary, ESZ/ESA etc., is located within 10km radius of the study area. An application for Groundwater withdrawal was submitted to Water Resource Department submitted on 19.06.2023. No Rehabilitation and resettlement is involved in this proposal.

The Project Proponent has informed the EAC that ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road. Width of the road is 7.0m. Twenty four hours continuous volume count was manually undertaken during May-2023. The EAC noted that the width of the road is not adequate. About 1205 no. of trips per day will be carried out. No. of working days will be 365. The EAC was of the view that when the rainfall is 3500 mm/year it will be difficult to carry out mining for 365 days. The Project Proponent has informed the EAC that 275 working days are considered for calculation of traffic load. The EAC asked the Project Proponent to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The EAC also asked the Project Proponent to strengthen the road and convert the road into concrete road.

The Project Proponent also informed the EAC that the predominant wind direction was from West to East. Wildlife Conservation Plan has been prepared and submitted to Chief Wildlife Warden (CWLW) on 19.06.2023 for approval with a budget of Rs. 50 Lakhs. At the end of conceptual stage, an area of 105 ha will be under green belt/ plantation. Eco restoration will be carried out in similar to the reclaimed activity carried out in Sanquelim mine. Public hearing was carried out on 11.08.2023 and a budget of Rs 309.3 Lakhs have been earmarked to address the concerns raised during public hearing. The EAC also noted that about 4708 written objections was submitted against the project during the public hearing. The Project Proponent has informed the EAC that the issues are same but the no. of objection letters were more in number and about 5183 no.s of letters were also received in support of the project. The EAC also noted that many complaints were received against the public hearing dated 11.08.2023. The EAC asked the Project Proponent to submit the video recording of the public hearing. There are three court cases at present regarding the auction process and one of the court case was disposed on 17.07.2023 and will abide the directions of the Hon'ble High Court. Other two cases in the matter of MSPL v. State of Goa & Ors. in WP 592 of 2022 and in the matter of Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors. in PIL WP 2029/2023 (F) are pending before the Hon'ble High Court and no adverse orders has been passed.

The Department of Mines and Geology, Goa was invited as a special invitee to discuss the present status of mining in Goa. The Deputy Director has informed that the State Govt. is looking positive to restart the mining operations in Goa. Besides 10% DMF, there is also a scheme called Goa Iron Ore permanent fund wherein 10% of the sale value of the mineral will be spent towards community based activities as per the direction of the Hon'ble Supreme Court. The State Govt. has put up a scheme for approval before the Hon'ble Supreme Court in line with Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) Scheme. This fund has to be kept for prosperity. The report with regard to illegal mining will be obtained from the SIT and will be provided to the Ministry.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the handling of waste of 25.162 MTPA will be more than the Iron Ore production capacity of 3.0 MTPA. The EAC was of the view that the pollution potential will be more in handling of waste. The EAC not convinced with plan for backfilling and with the design of settling ponds as the annual rainfall is projected as 3500 mm/year. The EAC observed that the instant mine is located in dense vegetation area. The EAC also noted that the mine lease area is located close to the proximity of the habitations, school, forest (Mayem common boundary), river, temples, caves and fort. The EAC also observed that the Project Proponent has not properly worked out the traffic load. Many litigations were received against the public hearing/project. Further, the EAC also noted that mines were not in operation in Goa from the year 2018 and this instant proposal is a first case for grant of Environmental Clearance (EC) under auction after 5 years. Thus there is a need to ascertain the present scenario and ground reality with regards to handling of waste, settling ponds, location of waste dump w.r.t habitation, school and river, other surface features as forest (Mayem common boundary), temples, caves and fort, mineral transportation route and traffic congestion. The EAC was of the view that a site visit needs to be conducted by a sub-committee comprising of EAC Members and officers from MoEF&CC. The EAC opined that the Ministry may constitute a sub-committee and submit its report to enable the committee to take a decision on the proposal. Therefore, the EAC **deferred** the proposal for want of following additional information: -

- i. The site visit report of the subcommittee.
- ii. The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.
- iii. The Project Proponent needs to submit the design of settling ponds by considering the annual rainfall, catchment area and its discharge.
- iv. The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road into concrete road.
- v. Since the mine lease area is sharing the Mayem Forest common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.
- vi. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?
- vii. The Project Proponent needs to submit the video recording of the public hearing.

3.2.5. Recommendation of EAC

Deferred for ADS

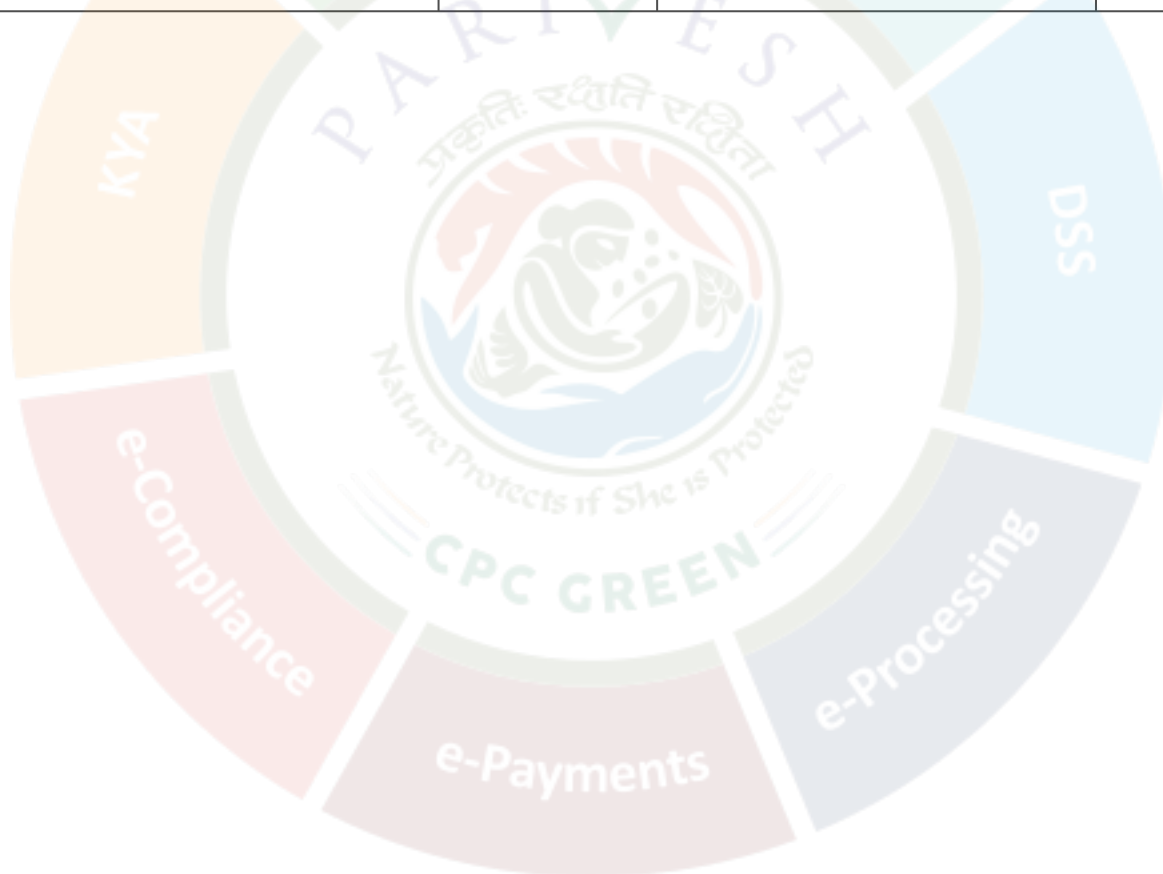
4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Mr Pankaj Verma	Scientist E	pankaj.verma@nic.in	
2	Dr Dinesh Misra	IFS (Retired)	dmisra56@gmail.com	
3	Sh Niranjana Kumar Vasu	Member (EAC)	vasuifs@gmail.com	
4	Dr Asha Rajvanshi	Member (EAC)	asharajvanshi@gmail.com	

5	Shri Avijit Gosh	Member (EAC)	avijitmining@gmail.com	
6	Shri Bandi Ramchandra Reddy	Member (EAC)	reddyramchandra8858@gmail.com	
7	Prof Pramod Kumar	Member (EAC)	nita_pramod@yahoo.com	Absent
8	Prof Devesh Walia	Member (EAC)	devesh.eac@gmail.com	Absent
9	Dr Suresh Tiwari	Member (EAC)	smbtiwari@gmail.com	Absent
10	Dr K G Asha Manjari	Member (EAC)	kimberlite2016@gmail.com	
11	Prof Dev Dutt Sharma	Member (EAC)	ddshpu@gmail.com	Absent
12	Dr Y G Kale Representative of IBM	Member (EAC)	ygkale@ibm.gov.in	
13	Shri Mohammad Niyazi	Member (EAC)	dirsnt.dgms@gmail.com	
14	Mr V K Soni Representative of IMD	Member (EAC)	vijay.soni@imd.gov.in	Absent



Minutes of 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR**

SUMMARY RECORD OF 20TH MEETING OF THE COMMITTEE OF THE RE-CONSTITUTION OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 20th meeting of the Re-constitution of Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 21-22 September, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 19th EAC (Non-Coal Mining) meeting held during 24-25 August, 2023:

The minutes of the 19th EAC meeting held during 24-25 August, 2023 were placed before the members of the EAC.

Day 1: 21st September, 2023 (Thursday)

1.1 Proposal for Mining of Iron Ore in Jilling Langelotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste- 7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha - [Proposal No: IA/OR/MIN/440292/2023, IA-J11015/34/2021-IA-II(M), EIA Consultant: M/s. MECON Ltd] - Environmental Clearance (Auction mine)

The instant proposal is for mining of Iron Ore in Jilling Langelotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA

Minutes of 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023

[Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste- 7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 21°56'37.5297"N to 21°08'53.4185"N and Longitude: 85°25'08.8832"E to 85°26'37.1370"E. The mine lease area falls under the Survey of India Toposheet No: 73F/8 and 73G/5 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. The Project Proponent has submitted that the previous lessee obtained Environmental Clearance for a production capacity of 6.28 MTPA of Iron Ore vide EC letter J-11015/959/2007-IA-II (M) dated 7th June 2012.
- iv. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
13.04.2021	IA-J11015/ 34/2021-IA-II(M) IA/OR/MIN/ 207724/2021	13-16 July, 2021	Terms of Reference of M/s Odisha Mining Corporation for Jilling Langalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 15.668 Million TPA [Saleable Iron ore- 9.239 Million TPA, Mineral rejects- 0.761 Million TPA, Waste 5.668 Million TPA, Topsoil: Nil] with	04.08.2021

Minutes of 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023

			proposed 1 x 2000 TPH stationary multistage crushing & screening plant along with existing 1x300 TPH Stationary Crusher Plant (In pit plant), 1x300 TPH Stationary Crusher Plant (OCU1), 1 x 200 TPH Stationary Crusher Plant (OCU-2), 1 x 300 TPH Stationary Crusher Plant (OCU-3), 1 x 200 TPH Stationary Crusher Plant (OCU-5), 1 x 400 TPH Mobile Crusher Plant, 1 x 50 TPH Stationary Screening Plant, 1 x 150 TPH Mobile Screening Plant, 1 x 100 TPH Mobile Screening Plant, 5 x 150 TPH Mobile Screening Plant at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	
26.10.2022	IA-J11015/ 34/2021-IA-II(M) IA/OR/MIN/ 292822/2022	9-11 November, 2022	Amendment in Terms of Reference (ToR) dated 04.08.2021 for M/s Odisha Mining Corporation Limited for Jilling Langalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects- 2.2276 Million TPA, Waste-7.4385 Million TPA, Topsoil: Nil] along with Existing: 5 nos. with	28.11.2022

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			Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH, located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	

v. Details of Mine Lease:-

S. no	Grant of PI/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Reservation of Jilling-Langlotta Iron Ore vide No 299/ IV(AB)SM-01/ 2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
2	Letter of Intent vide 307/IV(AB) SM-01/2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
3	Order No 317/IV	11.01.2021	Iron Ore	10 years	Govt of	456.037 ha (as

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	(AB) SM-01/2021/SM and Order is valid for a period of 2 years from the date of execution of the lease deed or till the date of getting fresh approvals, clearances, licenses, permits and the like whichever is earlier.				Odisha	per DGPS)/ 456.100 ha ha (as per RoR)
4	Grant of mining lease vide order no 338/SM	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)

vi. Details of executed Mine leases

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	11.01.2021	10.01.2031	Certificate No: IN-OD01560940427432T

vii. Land Use/Land Cover of the Mine Lease Area:

Private land	42.001 ha
Forest Land	392.289 ha
Non-Forest Govt. Land	21.747 ha
Total Mining lease area (MLA)	456.037 ha (as per DGPS Survey)
Private land for crusher, workshop & other infrastructure outside the MLA	All facilities within ML Area
Additional information(if any)	ML Area 456.100 ha as per RoR

viii. Details of Mining Plan: -

Modification of Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	Lr No. MPM/A/15-ORI/BHU/2021-22/1241
	Date	18.11.2021
	MLA	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
	Mineral	Iron Ore (Major Mineral)
	Validity	Up to 2024 - 25

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Additional information (if any)	On account of correction in the waste quantity, a corrigendum to the Mining Plan Approval Letter was issued by IBM vide letter No. ORI/IRON/KJR/MCDR-93/BBS dated 11.10.2022
Mining Parameters	Quantitative Description
Method of Mining	Fully Mechanised Open Cast Mining
Drilling/Blasting	In Jilling-Langalotta, Jilling-Gangaigora and Appahatu quarries 13 m and 11 m deep boreholes respectively will be drilled using 115 - 150 mm dia DTH drills. These will be filled with explosives and blasted. The powder factor has been estimated to be 12 t/kg. The explosives consumption at the 6.28 MTPA stage ~875 t/yr which is expected to increase to 1306 t/yr at the 10 MTPA stage.
Bench Height	10 m
Bench Width	10 - 15 m
Individual bench slope	80° - 85°
Overall pit slope	45°
Life of mine	8 years incl. present plan period. May be revised on basis if reserves are updated on basis of further detailed exploration
RoM output size	10.0 MTPA
Transportation details	At least 70% of the production will be despatched by railway wagons from private siding located within ML area. Max. 30% of production will be despatched by road.
Dumpers capacity	28 nos. 60 t capacity + 40 nos. 80 t capacity
OB/Waste	About 11.59 Mm ³ overburden will be generated and 1.74 Mm ³ will be dumped in existing active external OB dump within ML. About 0.528 Mm ³ will be dumped in 2 new external OB dump within mine lease. Balance 9.32 Mm ³ will be used for backfilling exhausted quarries. All mineral rejects, generated during the residual mine life to be blended with high quality iron ore & sold. Accumulated stock of mineral rejects, presently dumped in 2 nos. external dumps to be re-handled and sold off with / without blending. Any top soil to be generated shall be concurrently used in plantation.
Additional information (if any)	One of the existing open cast quarries (out of the four) exhausted. These will be backfilled.

ix. Water requirement:

Total water requirement	1166 m ³ /day	Fresh water	916 m ³ /day
		Treated water	250 m ³ /day
Source	Ground water and Surface water		
Permission	No Objection Certificate has been obtained from CGWA vide letter no. CGWA/NOC/MIN/REN/1/2023/7964 dated 22-06-2023 for abstraction of fresh water of 480 m ³ /day and is valid up to the period 30.03.2024.		
Additional	In future, about 916 m ³ /day of fresh water is required, 436 m ³ /day		

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information(if any)	shall be drawn from DalkoNala which flows through the ML area. OMC is submitting an application to the Department of Water Resources, Govt. of Odisha for drawal of water from DalkoNala. The balance 480 m ³ /day (only for potable use) shall be drawn from bore-wells.

x. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Jalahari Jurudi	Part of Village located within NW part of ML area Adjacent to M.L. area on West
Town	Joda	~2.5 km N
Highway	Expressway No. 2 NH-215	Expressway No. 2 passes through ML area NH-520: ~6.8 Km N
Interstate Boundary	Odisha-Jharkhand	~15.2 km, NE
Railway Station/line	Jalhari SE-Rly.'s Padapahar Jn.– Banspani – Keonjhar – Jakhapura Jn. B.G. Main Line passes through ML	~0.7 km W of ML
Water body	DalkoNala Baitarani River	Flows from W to E through approx. Middle of ML area ~0.5 km, E
Monument	None within 15 km	

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	Yes	An area of 392.289 ha of forest land lies within mine lease area. Stage II FC obtained vide Lr No F.No-8-49/98FC(pt) dated 8 th October 2014 for an area of 342.602 ha of forest land. An application for diversion of balance area of 22.697 ha of forest land has been submitted vide proposal no. FP/OR/MIN/142115/2021 dated 08.05.2021. Compliance to the ADS sought by MoEFCC during scrutiny of Stage-I FC compliance is under recommendation process by State Forest Dept. Net Present Value (NPV) of the Forest amounting to Rs. 27,71,46,750/- has been paid.
National park	No	Nil within 10 km radius
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ)/Eco-	No	

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Sensitive Area(ESA)		
Wildlife corridor, migration route etc.	No	Karo-Karampada Elephant corridor: ~18 km, NW
Schedule-I Species	Yes	Indian Elephant, Sloth-bear & Mouse Deer as per the list authenticated by DFO Keonjhar Division.
Wildlife Conservation Plan	Yes	Site-Specific Conservation Plan has been prepared and approved by the PCCF (WL) vide letter No.10895 dt.15.12.2010. Total financial out lay: Rs.412.00 lakhs .

xii. Green belt/plantation details:

Proposed area for green belt/plantation	183.718 ha at Conceptual Stage
Budget for green plant& plantation till the end of life of mine.	Rs 4,54,50,000/- (Rupees Four Crore Fifty Four Lakhs Fifty Thousand Only)
Budget for nursery	Nil as plantation will be outsourced to Odisha State Forest Development Corporation (a Govt. of Odisha entity) who has their own nurseries.
7.5 m barrier & non-mineralized zone	83.0191 ha (40.696 ha over external dumps + 39.5539 ha mineral storage area + 2.7692 ha mineral processing area)
50 m safety zone of nallah, roads, electric lines	Included in above
500 m safety zones of nearest habitation villages	-
Additional information (if any)	Plantations over an area of 1.91 ha of exhausted quarry benches & backfilled areas

xiii. Baseline details:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	01-10-2021 to 31-12-2021		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-Monsoon Season		
Predominant Wind direction (From)	West		
Ambient Air Quality (no. of locations) and results	No. of Location	Parameters	Results
	9	PM10	44.0 to 95.0 µg/m ³
		PM2.5	27.0 to 55.0 µg/m ³
		SO2	4.0 to 10.2 µg/m ³
		NO2	10.3 to 22.0 µg/m ³
		CO	0.087 to 1.654 mg/m ³

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Noise level (no. of locations) and results	No. of Location	Parameters	Results
	08	During Day Time [Leq dB(A)]	38.1 to 56.4
		During Night Time [Leq dB(A)]	37.1 to 45.8
Water Quality (no. of locations) and results	Ground water quality		
	No. of Location	Parameters	Results
	06	pH	6.71 to 7.08
		TDS (mg/l)	54 to 306
		Fluoride (mg/l)	0.1 to 0.24
		Chloride (mg/l)	13.5 to 61.7
		Fe (mg/l)	0.05 to 1.96
	Surface Water Quality		
	No. of Location	Parameters	Results
	06	pH	6.94 to 7.26
		DO (mg/l)	5.6 to 6.8
		BOD (mg/l)	2.0 to 3.0
		Total Coliform (MPN/100 ml)	1000 – 1700
Soil Quality (no. of locations) and results	No. of Location	Parameters	Results
	06	pH	5.67 to 7.62
		Electrical Conductivity (µS/cm)	49.7 to 254
		Organic Matter (%)	0.84 to 5.91
		Available Nitrogen (kg/ha)	50 to 188
		Available Phosphorus (kg/ha)	0.2 to 3.1
		Available Potassium (kg/ha)	98 to 476
Traffic study (no. of locations) and results	The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs (see Table 3.53.2 in Chapter 3). It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck = 3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume. The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs. It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck = 3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume.		

xiv. Public Hearing (PH) Details:

Advertisement for PH with	❖ English daily newspaper: “The New Indian

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date	Express”, Bhubaneshwar edition dated 06 April, 2023 ❖ Odiya daily newspaper: “The Pragatvadi”, Bhubaneshwar edition dated 06 April, 2023
Date of PH	09 th May, 2023
Venue	JalahariMouza (Khata No. 34, Plot Nos. 253, 254 & 253/431), Barbil Tehsil, Keonjhar District
Chaired by	ShriJadumaniMahala, OAS, (SAG), Addl. District Magistrate (Revenue), Keonjhar
Main issues raised during PH	a) Employment b) Supply of clean drinking water c) Improvement in education facilities and infrastructure d) Improvement in health care delivery systems e) Air pollution and diseases due to air pollution f) Poor conditions of roads g) Need for support to Self Help Groups (SHGs) l) Garbage disposal
Budget proposed for addressing issues raised during PH	Rs. 1865.582 Lakhs (To be spent over 3 years)
Additional information (if any)	Meeting attended by 482 persons including 328 persons from the Core Zone Villages. 39 persons (37 from the Core Zone villages). 33 written representations also have been received.

xv. Details of CTE, CTO, Certified Compliance Report and Past production details:-

Consent to Establish (CTE)	Odisha State Pollution Control Board granted the Consent to Establish vide order dated 09.08.2018 in favour of M/s Essel Mining and Industries Limited.			
Consent to Operate (CTO)	Odisha State Pollution Control Board granted the Consent to Operate vide order dated 31.03.2022 for production of Iron Ore (ROM) 6.28 MTPA and the consent order is valid for the period 01.04.2022 to 31.03.2023 in favour of M/s OMC Ltd.			
Certified Compliance Report (CCR)	Certified Compliance report issued by the Regional Office, MoEF&CC vide F.No: 101-420/23/EPE dated 09.08.2023 for the EC dated 07.06.2012. Site visit was conducted on 07.07.2023.			
Past production	Certified production details issued by the Dy. Director of Mines vide Lr.Memo No: 2265/Mines, dated 18.05.2021 for the period 1994-95 to 2022-23.			
	Year of Production	EC sanctioned capacity (t)	Actual Production (t)	Excess Production beyond the EC

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				sanctioned capacity
	1993-94	-	-	-
	1994-95	-	442127	-
	1995-96	-	555942	-
	1996-97	-	622305	-
	1997-98	-	922181	-
	1998-99	-	934156	-
	1999-00	-	819426	-
	2000 – 01	-	1277927	-
	2001 – 02	-	1613107	-
	2002 – 03	-	1967094	-
	2003 – 04	-	2054898	-
	2004 – 05	-	3378059	-
	2005 – 06	4200000	3856454	-
	2006 – 07	4200000	3460258	-
	2007 – 08	4200000	3997499	-
	2008 – 09	4200000	4599848	399848
	2009 – 10	4200000	4224984	24984
	2010 - 11	4200000	2947756	0
	2011 - 12	4200000	172558	0
	2012 - 13	6280000	2306742	0
	2013 - 14	6280000	2683497	0
	2014 - 15	6280000	0	0
	2015 - 16	6280000	0	0
	2016 - 17	6280000	0	0
	2017– 18	6280000	447629	0
	2018– 19	6280000	6271381	0
	2019 - 20	6280000	6268396	0
	2020 - 21	6280000	196350	0
	2021 - 22	6280000	5653000	0
	2022 - 23	6280000	6280000	0
Compliance of Hon'ble Supreme Court order dated 02.08.2017	A request letter was submitted by OMC to Jt. Director of Mines, Joda, Dept. of Steel & Mines with a request to duly authenticate the production figures since inception of mine and to provide the details of demand served to the ex-lessee, if any, for the Ores/Minerals raised in excess of the approved quantity with respect to EC for violation of EP Act, 1986 and violation of Mining Plan and CTO pertaining to Jilling-Langalotta Iron Ore Mining Project. In response to the above, Joint Director Mines, Joda, District Keonjhar vide letter dated 30.12.2021 has provided the certificate regarding			

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	payment towards compensation for excess production made by Ex-lessee.		
	Details of Demand Notices and Status-Common Cause Judgement		
	S.No	Details of Violation	Demand Notice
	1	EC	Demand Notice No. 4040/ Mines dt.02.09.2017
	2	FC	Demand Notice No.6375/Mines, dt. 26. 12.2017
	3	MP/CTO	Demand Notice No.3862/Mines, dt. 19.09.2018
Amount			
			Rs.641,2432,386/-
			Rs.1056,05,98,961/-
			Rs. 128,12,05,207/-
As per records available, M/s. Essel Mining & Industries Ltd, had deposited a total of Rs. 1825,87,36,554/- towards the compensation amount in the designated bank account as directed by the Hon'ble Supreme Court vide order W.P. (C) No. 114/2014 (Common Cause) dated 02.08.2017. Further, OMC started operating Jilling-Langalotta Mine with effect from 28-02-2021. Since then, no Environment & Forest related violation has been reported in respect of Jilling-Langalotta Iron Ore Mines. Project Proponent has submitted the Certificate from the Office of the Joint Director Mines Joda, Dist; Keonjhar vide No. 7304/Mines, dated 30.12.2021 certifying that the present lessee M/s Odisha Mining Corporation Limited is confined the mining activity within the granted and executed leasehold area. Project Proponent also submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no. M 054791 dated 09.07.2021 stating that the M/s OMC shall comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Others before grant of ToR/EC pertaining to Jilling-Langalota Iron Ore mining project.			

xvi. Rehabilitation & Resettlement (R&R):

R & R details	Present proposal does not involve any land acquisition. There are some patches of private land within the ML area but these will not be acquired.

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	Thus the project does not involve any R & R of land oustees.

xvii. Court case details:

Court Case	The Project Proponent submitted they do not have any litigation and also not received any court notice so far in respect of Jilling-Langalotta Mines after allotment of the mine to OMC.

xviii. Affidavit/Undertaking details:

Project Proponent submitted an Undertaking vide letter dated 09.08.2023	The Project Proponent has submitted an undertaking stating that the prescribed Terms of Reference has been complied while conducting the EIA Studies. The contents (information and data) as given by the Consultant in the EIA/EMP report are factually correct with full knowledge.
Consultant submitted an Undertaking vide letter dated 10.08.2023	The EIA/EMP report has been prepared as per ToR prescribed by MoEF&CC vide ToR letter dated 04.08.2021 and amended ToR letter dated 28.11.2022 based on baseline environmental data monitored by Environmental Engineering Laboratory, MECON Limited (CPCB recognized Laboratory) during Post-Monsoon Season 2021 and ToR prescribed for above mentioned project has been complied while conducting the EIA-EMP studies and the data submitted is factually correct.

xix. Details of the Environmental Management Plan (EMP):

Activities	Recurring cost (Lakhs Rs./yr)	Capital cost (Lakhs Rs.)
Pollution control	45	423 ^a
Pollution monitoring (laboratory)& CAAQMS	42 ^b	400
Occupational safety	50 ^c	20 ^d
Green belt & plantation at safety zone	-	454.5 ^e
Net Present Value(NPV) of Forest	-	2771.47
Compensatory Afforestation	-	61.995
Wildlife Conservation	6.55 ^g	346.50 ^f
Socio-economic welfare measures in nearby villages (CSR budget)	57.51 ^h	-
Budget for addressing Public Hearing commitments (erstwhile known as CER)	-	1865.58 ⁱ
Total	201.06	~6343.045

Note:

a =Surface drainage (garland drains, settlement pits, retaining wall etc.) + dust suppression system.

b =Cost for EMC (Environmental monitoring work is outsourced to accredited labs)& AMC of CAAQMS installed

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c =Cost towards routine medical examinations, training & awareness

d =Cost of safety appliances procurement

e =On Basis of costs prevailing in 2022 – 23.

f = To be deposited with Divisional Forest Officer

g = Rs. 65.5 Lakhs to be spent over 10 years

h = Budget for 2022-23. Likely to be revised every year.

i = This money will be spent over a period of three years

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP)	EMP Capital Cost: Rs.44.77 Crores
Project Cost	Rs.431 Crores
Employment	488 Nos.

3. Observation and Recommendation of the EAC: -

The Project Proponent and the Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and also the active quarries i.e., on the north western side and other one in southern side in the mine lease area. One Quarry i.e., Khuntapani was exhausted. A private railway siding is located on the north western side to dispatch the material. Backfilling has been started in the center quarry of the mine lease area. Some part of the area in the north eastern side has been taken by the State Govt for supply of water to the Joda Town. A small township is located within the mine lease area. There is a small stream (Dalko Nallah) passing from west to east in the mine lease area which is joining the Baitarani River located at a distance of about 0.5 km on the eastern side of the mine lease area. Adequate safety zone of about 13 ha will be maintained all along the nallah. No proposal to divert Dalko Nallah. NH-520 is located about 7km from the mine lease area. Other mines such as Tata Steel Ltd is located on the northern side of the mine lease area and Rungta Mines is located on the southern side of the mine lease area.

The Project Proponent has briefed about the chronology of the auction of the mine lease area. The Transfer of EC has been obtained in the name of M/s Odisha Mining Corporation Ltd and due to technical error in Parivesh portal the same could not able to download. In the instant proposal, there is no proposal for setting up of beneficiation plant in the mine lease area. The Project Proponent has informed the EAC that the total mine lease area is 456.037 ha (as per DGPS Survey), out of which 42.001 Ha is a Pvt land, 329.289 ha is a Forest land and 392.289 ha is a non-forest land. Stage II FC has been obtained vide letter dated 8th October 2014 for diversion of forest land of 342.602 ha in the name of M/s Essel Mining & Industries Ltd. Transfer of FC is under process with the State Govt. An application for diversion of balance area of 22.697 ha of forest land has been submitted vide proposal no. FP/OR/MIN/142115/2021 dated

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08.05.2021 and is under process. Life of the mine is 8 years and is likely to increase with updation of reserves by further exploration. All mineral rejects, generated during the residual life of mine will be blended with high quality iron ore & sold out. The mineral dispatch is carried out at least 70% through rail from pvt. sidings within mine lease and balance 30% by road. No R&R involved in this proposal.

The Project Proponent has informed the EAC that there is no wildlife corridor and migration route within the study area. Karo-Karampada Elephant corridor is located at a distance of about 18 km on the North Western side and there is no movement of elephants in the study area. The EAC not convinced with the statement of the Project Proponent. The Project Proponent has informed the EAC that there is only occasional movement of elephants in the study area and it is not a habitat of elephants. Site-Specific Conservation Plan has been approved by the PCCF (WL) in the year 2010. The implementation status is under process. Long term regional level elephant management plan by Wildlife Institute of India is also under process. The EAC noted that National Highway also have specific elephants crossing area in Odisha. The EAC was of the view that the linear barriers created for movement of elephants and habitat use needs to be properly addressed in terms of scientific management and a plan for movement of elephants from one forest to the other forest area shall be included in the conservation plan. The EAC asked the Project Proponent to submit the activities proposed under Wildlife Conservation Plan along with the budget.

The EAC asked the Project Proponent that whether the quality of surface water is being monitored at Baitarani River during the monsoon. The Project Proponent has informed the EAC that the quality of surface water is being monitored regularly and submitted to the State Pollution Control Board. The Project Proponent has shown the retaining wall and garland drain around OB dump. The EAC opined that the Project Proponent needs to strengthen the garland drain. The EAC asked the Project Proponent whether railway line passing through the mine lease area or not. The Padapahar Jn. – Joda – Kendujhargarh - Jakhapura Railway Line passes through the ML area occupying 34.967 ha area. This includes 26.990 ha of Forest Land. Indian Railways had taken separate permission for construction of this Railway Line. OMC's existing operations are beyond this railway corridor and the status quo shall be maintained.

The Project Proponent has informed the EAC that the Joint Director of Mines, Joda, District Keonjhar vide letter dated 30.12.2021 has provided the certificate regarding payment towards compensation for excess production made by Ex-lessee. As per records available, M/s. Essel Mining & Industries Ltd, had deposited a total of Rs. 1825,87,36,554/- towards the compensation amount in the designated bank account as directed by the Hon'ble Supreme Court vide order W.P. (C) No. 114/2014 (Common Cause) dated 02.08.2017. Project Proponent also informed the EAC that M/s OMC

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started operating Jilling-Langalotta Mine with effect from 28-02-2021. Since then, no Environment & Forest related violation has been reported in respect of Jilling-Langalotta Iron Ore Mines. Further, the Project Proponent has informed the EAC that a Certificate has been obtained from the Office of the Joint Director Mines Joda, Dist; Keonjhar vide letter dated 30.12.2021 certifying that the present lessee M/s Odisha Mining Corporation Limited is confined the mining activity within the granted and executed leasehold area.

The Project Proponent has shown the Certified Compliance report issued by the Regional Office (RO), MoEF&CC vide letter dated 09.08.2023 for the EC dated 07.06.2012. Site visit was conducted on 07.07.2023. Regional Office has mentioned that the greenbelt development may be increased, reclamation of backfilled area with vegetation may be initiated and density of plantation may be increased. The EAC asked the Project Proponent whether the action taken report has been submitted to the Regional Office or not. The Project Proponent has informed the EAC that they will submit the action taken report. The EAC also asked the Project Proponent to clarify whether any court case/litigation pending against the previous lessee w.r.t temporary working permit and whether the same has been transferred to M/s Odisha Mining Corporation Ltd or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the action plan for strengthening the garland drains including their dimensions along with the timeline.
- ii. The EAC was of the view that the linear barriers created for movement of elephants and habitat use needs to be properly addressed in terms of scientific management and a plan for movement of elephants from one forest to the other forest area shall be included in the conservation plan. Accordingly, the Project Proponent needs to submit the activities proposed under Wildlife Conservation Plan along with the budget.
- iii. The Project Proponent needs to submit the action taken report for the non-compliances identified by the Regional Office.
- iv. The Project Proponent needs to submit the treatment methods to eliminate iron in groundwater so as to make it fit for drinking purpose.
- v. The Project Proponent needs to clarify whether any court case/litigation pending against the previous lessee w.r.t temporary working permit and whether the same has been transferred to M/s Odisha Mining Corporation Ltd or not.

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- vi. The Project Proponent should submit measures taken to prevent contaminated water meeting Baitarani river.
- vii. The Project Proponent needs to submit the action plan for effective dust suppression system near haul roads and crushers with a provision for installation of online dust monitoring system.

1.2 Sarah Kishnayat Ball Clay, Fire Clay, Red & Yellow Ochre Mine lease of M/s Deepak Mineral Industries for enhancement of production capacity from 20,000 TPA to 5,35,880 TPA (ROM) (Overburden: 2,35,880 TPA, Marketable mineral: 2,70,000 TPA, Mineral Waste: 30,000 TPA) in the mining lease area of 69.59 ha, located Near Village Sarah Kishnayat, Tehsil- Kolayat, District Bikaner, Rajasthan - [Proposal No: IA/RJ/MIN/435186/2023, F.No: J-11015/269/2005-IA.II(M); EIA Consultant: M/s Fulgro Environmental & Engg. Services India Pvt. Ltd.] – Terms of Reference (ToR)

The instant proposal of M/s Deepak Mineral Industries is for mining of Ball Clay, Fire Clay, Red & Yellow Ochre Mine with enhancement in production capacity of Ball Clay from 20,000 TPA to 5,35,880 TPA (ROM) (Overburden: 2,35,880 TPA, Marketable mineral: 2,70,000 TPA, Mineral Waste: 30,000 TPA) in the mining lease area of 69.59 ha, located near Village Sarah Kishnayat, Tehsil- Kolayat, District Bikaner, Rajasthan.

2. Observation and Recommendation of the EAC: -

The Project Proponent informed the EAC that the instant proposal was earlier considered in the EAC meeting held during 14-15 May, 2018 and the Ministry informed the Committee that PP had enhanced the production capacity without EC and in light of the Common Cause Judgment pronounced by the Hon'ble Supreme Court on dated 02.08.2017 this is a case of violation. The Committee, therefore, deferred the proposal noting that a separate Committee has been constituted for dealing with the projects involving violation of EPA, 1986 vide notification issued by the Ministry on 14.03.2017.

The EAC noted that the Project Proponent has submitted the fresh proposal for grant of Terms of Reference. The EAC asked the Project Proponent that whether the proposal submitted during the year 2018 and at present is same or different or whether there is a change in the scope or not? The Project Proponent has informed the EAC that during the year 2018, the proposal for Terms of Reference (ToR) was submitted for enhancement of production capacity from 20,000 TPA to 3,00,000 TPA (ROM) and now the proposal has been submitted for enhancement in production capacity of Ball Clay from 20,000 TPA to 5,35,880 TPA (ROM). The Project Proponent also informed the EAC that difference is that earlier Overburden: 2,35,880 TPA was not included in the

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proposal and now the same has been included. The EAC was of the view that there is a change in the scope of the proposal and hence the instant proposal shall be treated as fresh proposal. The EAC asked that the Project Proponent to submit the proposal to the SEIAA, Rajasthan as per the provisions of EIA Notification, 2006 and its subsequent amendments.

Then, the Project Proponent vide email dated 22.09.2023 informed that as per Ministry's Notification no S.O No. 3977(E) dated 14th August 2018, the proposal was already submitted to SEIAA, Rajasthan vide online proposal no: SIA/RJ/MIN/29973/2018 dated 24th Nov 2018 and the proposal was considered in the SEAC meeting held during 1-4 July, 2019 wherein the SEAC has noted that the Project Proponent has not submitted original record of the MoEF& CC pertaining to the project. The SEAC considered the matter in its 4.15th meeting held on 04.07.2019 and resolved to ask the PP again, to bring original report of the MoEF&CC. In this regard, the Project Proponent vide email dated 22.09.2023 requested the Ministry to transfer the old project file to SEIAA, Rajasthan. Based on the request of the Project Proponent, the EAC opined that the Ministry may transfer the old project file to SEIAA, Rajasthan as per the provisions of EIA Notification, 2006 and its subsequent amendments. Therefore, the EAC **returned the proposal in present form.**

1.3 Amendment in EC dated 31.08.2020 w.r.t specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh - [F.No: J-11015/190/2016-IA.II(M), Proposal No: IA/MP/MIN/435272/2023, EIA Consultant: M/s J.M. EnviroNet Pvt. Ltd] - Amendment in EC

The instant proposal is for amendment in EC dated 31.08.2020 w.r.t specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at the Central level.

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- ii. Initially, the Project Proponent has obtained Environmental Clearance (EC) on 31.08.2020 for mining of Limestone in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh. One of the specific condition (I) stipulated by EAC is that *“Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”*.
- iii. Now, the Project Proponent requested to waive off the specific condition no: (I) and requested to allow the mining in the entire mine lease area of 1594.34 ha as per the approved Modified Mining Plan.
- iv. The proposal was earlier considered in the 18th EAC (Non-Coal Mining) meeting held during 31st July & 1st August, 2023 wherein the EAC deferred the proposal for want of additional information. Then, the Project Proponent submitted the information on 25.08.2023 in Parivesh portal and accordingly the proposal was again reconsidered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023.

Based on observation of EAC in its EAC meeting held during 31st July & 1st August, 2023 and compliance of observation of EAC made by PP are detailed below:

S. No	Observation of EAC in its meeting held during 31 st July & 1 st August, 2023	Reply by Project Proponent
1	The Project Proponent needs to give proper justification for amendment in EC with clear picture of sequence of mining, plan for backfilling and details of the land acquired and to be acquired in the villages for mining and location to access.	The Project Proponent has submitted that the EC was granted on 31.08.2020 with a specific condition stating that the <i>“Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”</i>. Accordingly, Mining Plan has been modified and approved on 19th June, 2023 with change of mining sequence to avoid the void in West side of Dewra Village. As

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		on date, an area of 360.66 ha of land has been purchased, Surface right has been granted for mining on Govt. land over an area of 75.754 ha, hence, total land under possession is 436.414 ha. The balance of 1157.926 ha is under purchase as per the mining activities progress. Now, the mining has to be done as per the approved Modified Mining Plan and in the Modified Mining Plan, the mining has to be done near Dewra Village so that void is avoided on West side of Dewra Village which was the requirement of EC. As per the earlier Mining Plan, the backfilling was proposed near Village Judi from the 2nd five year. Now, as per the Modified Mining Plan, the backfilling is proposed from 2nd five year in West Side of Dewra and Judi. The backfilling plan also indicates that at the conceptual stage, both sides of the Village Dewra were surrounded by water reservoir and now in modified backfilling plan, the entire surrounding of the Dewra Village has been reclaimed and covered by Greenbelt/ Plantation. In the view of the fact that the Specific Condition 1 has been complied with and mining is to be done as per the Approved Modified Mining Plan. Therefore, mining may be allowed as per the Modified Mining Plan.
2	The Project proponent needs to submit the comparison of sequence of mining in earlier mining plan and modified mining plan with detailed note and colour coding map.	The Project Proponent has submitted that initially, mining plan was approved in the year 2015 having proposed 1 st five year working near village Judi and 7 th , 8 th , 9 th & 10 th five year plans on the west of Dewra village with the proposal of creating water reservoirs in the mined out area at conceptual stage. At the time of EC appraisal, 235 ha land was under Company's acquisition and mining was restricted in 235 ha (available land at the time of EC) near Judi village. However, the

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		235 ha land was not in a continuous Block. As the land purchase is done in a progressive manner, as on date, the company is having total 436.414 ha (360.66 ha purchased and Surface right for mining on Govt. land of 75.754 ha) land under possession. Accordingly, the mining sequence has been modified and Modified Mining Plan has been approved by IBM, Jabalpur vide letter no. E 6699 MCDR-MPC0LST/15/2023-JBP-IBM_RO_JBP on dated 19th June, 2023. Now, the mining is to be done as per Modified Plan. In the conceptual plan of the Modified mining plan, mining is proposed in the 1st, 2nd & 11th five-year plan in the area falling on west side of Dewra village with backfilling starting from the 2nd five-year plan period to get it reclaimed and restored at the earliest to avoid the voids. The Project Proponent also submitted the map showing the status of the land such as purchased land, restricted land and Govt. land to be applied. Further, the Project Proponent also submitted the Progressive Mine Closure Plan and Conceptual Plan submitted at the time of EC appraisal and as per the Modified Mining Plan. The Project Proponent also submitted that to substantiate the requirement of backfilling material i.e. OB Soil and Waste rock, mining is proposed at 3 locations i.e. Block-A near Judi Village, Block-B on the west of Dewra Village and mine development at Block-C on the south of Dewra village having about 27 m thickness of OB Soil and waste rock above the limestone band of 26 m thickness. With the change in mining sequence, total volume excavated in Block-B is 2.45 million cu.m for removal of OB soil (2 m) &

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		Limestone (18 m) and the quantity of backfilling material available from Block - C from 2nd Five-year plan is 3.32 million cu.m which is required to be mined out to expose limestone band in Block C for ensuring scientific & systematic mining with focus on mineral conservation. With the change in mining sequence, EC specific condition 1 shall be complied at the earliest period as well as waste rock shall be effectively utilized for backfilling which will also reduce requirement of large no. of OB/waste dumps. The distance of mining area from the earlier proposed location for 1st five-year plan period is about 5.0 km from crusher located inside ML area near plant boundary. The limestone transportation may have impact on habitation at three locations of village Dewra. To ensure least impact from the start of mining activities the modified mining plan was submitted and approved by IBM, Jabalpur on 19th June, 2023 and now the majority of mining is proposed in Block-B on west of Dewra village (about 75% quantity) having lead distance of 1.5 km. This will also support cement manufacturing process with optimum blend of limestone quality and mineral conservation. Mining Plan has been modified and approved on 19th June, 2023 with change of mining sequence to avoid the void in West side of Dewra Village. Now, the mining has to be done as per the Approved Modified Mining Plan and in the Modified Mining Plan, the mining has to be done near Dewra Village so that void is avoided on West side of Dewra Village which was the concern of the EAC. In the view of the fact that the Specific Condition 1 has been complied with and mining is to be done as per the Modified Mining Plan. Therefore, mining may be allowed as per

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		the Modified Mining Plan. Further, the Project Proponent also submitted the year wise development plan submitted at the time of EC appraisal and as per the Modified Mining Plan.
3	The Project Proponent needs to ensure whether the tiger corridors/dispersal routes are passing through the study area or not as per the Integrated Landscape Management Plan for Greater Panna Landscape form the Chief Wildlife Warden, MP.	The Project Proponent has submitted that the distance of mine site from buffer zone of Panna Tiger Reserve is 12.94 km. Letter regarding the same has been received from CCF, Bhopal (Madhya Pradesh) on 15.06.2020. The Project Proponent also submitted that a letter has been obtained from DFO (South Panna), Madhya Pradesh on 11.08.2023 stating that <i>“Currently, Integrated Landscape Management Plan Greater Panna is not notified”</i> .
4	The Project Proponent needs to submit the compliance of the Wildlife Conservation Plan and their implementation status along with the proof of payments made to the State Forest Dept w.r.t approval of Wildlife Conservation Plan dated 13.12.2019.	The Project Proponent has submitted that the Wildlife Conservation Plan has been modified as per the recommendations to incorporate the revised financial outlay and the same has been submitted to the Forest Department. Further, the Company has deposited 100% amount; Rs. 289 Lakhs/- proposed for 10-year budget on 19 th August, 2023. PP also submitted the copy of acknowledgement receipt for amount paid along with the copy of approved Wildlife Conservation Plan.
5	The EAC wanted to know the documentary proof for the required acquisition of additional land. Hence, the Project Proponent needs to submit the land possession certificate for an area of 436.414 ha.	The Project Proponent has submitted that the break-up of 436.414 ha of land, i.e., out of 436.414 ha; an area of 360.66 ha is a Private land and remaining area of 75.754 ha is a Government land. Out of 360.66 ha of Private land, an area of 288.1 ha land has been transferred in the name of M/s Jaykaycem (Central) Limited and transfer of remaining area of 72.56 ha is under in Company's name is under process.

- v. The Project Proponent has submitted that the Mining Plan has been modified and approved by Indian Bureau of Mines vide Letter No: E 6699 MCDRMPC0LST/15/2023-JBP-IBM_RO_JBP dated 19.06.2023 with change of mining sequence to avoid the void in West side of Dewra Village. As on date, an

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area of 360.66 ha of land has been purchased and surface right has been granted over an area of 75.754 ha of Govt. land for mining and thus total land under possession is 436.414 ha. The balance area of 1157.926 ha is under purchase as per the mining activities progress. Hence, in compliance of Specific Condition no I, the Project Proponent requested to allow the mining as per the approved Modified Mining Plan.

- vi. The Project Proponent has submitted that there was no production done till 31st March, 2023. PP also submitted that there is no change in production capacity, land area, mining equipment and mining technology. All the declarations, undertakings, EIA/EMP report, Public hearing action plan submitted during detailed deliberations for earlier granted EC dated 31st August, 2020 are same as per the earlier proposal.

3. Observation and Recommendation of the EAC: -

The EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project Proponent has informed the EAC that initially EC was granted on 31.08.2020 wherein the specific condition (i) of EC dated 31.08.2020 states that the *“Mining shall be restricted to the land already acquired near Judi Village (235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for revalidation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area”*. Accordingly, Mining Plan has been modified and approved on 19.06.2023 with change of Mining sequence to avoid the void in West side of Dewra Village. As on date, an area of 360.66 ha of land has been purchased and surface right has been granted for mining on Govt. land of 75.754 ha and the total land under possession is 436.414 ha. The balance area of 1157.926 ha is under purchase as per the mining activities progress. Now, the mining activity has to be carried out as per the approved Modified Mining Plan. Accordingly mining has been proposed initially near Dewra Village so that backfilling can be started immediately in the mined-out pit to avoid any open void on the West side of Dewra Village, which was the suggestion of EAC and requirement of EC.

The Project Proponent also shown the comparison of progressive mine closure and conceptual plan as per earlier Mining Plan and Modified Mining Plan. The Project Proponent has informed the EAC that at the conceptual stage, water bodies on both the sides of the Dewra Village as per the earlier mining plan is now modified to be backfilled area/reclaimed area on both the sides of the Dewra Village in Modified Mining Plan. The additional acquired land falls in the 2nd five year working. The crusher area is located close to the Cement Plant. The Project Proponent informed the EAC that the distance of mine site from buffer zone of Panna Tiger Reserve is 12.94 km. Letter regarding the same has been received from CCF, Bhopal (Madhya Pradesh) on 15.06.2020. The

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Project Proponent also informed the EAC that a letter has been obtained from DFO (South Panna), Madhya Pradesh on 11.08.2023 stating that *“Currently, Integrated Landscape Management Plan Greater Panna is not notified”*. The Project Proponent has informed the EAC that the Wildlife Conservation Plan has been modified as per the recommendations to incorporate the revised financial outlay and submitted to the Forest Department. An amount of Rs 289.0 Lakhs has been deposited on 19.08.2023 and the Project Proponent has shown the Copy of acknowledgement receipt for amount paid along with approved Wildlife Conservation Plan.

The EAC noted that the Project Proponent has modified the mining sequence to avoid the void in west side of Dewra Village and accepted to waive off the specific condition no. (i). After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 21-22 September, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of amendment in Environmental Clearance dated 31.08.2020 to w.r.t waive off the specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra-Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh along with the following additional specific conditions:-

- i. The Project Proponent needs to make provision for permanent water sprinklers so as to reduce the water consumption. Further, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. Online air monitoring system should be installed near crusher and haul roads to control dust generation during mining.
- ii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- iii. The Project Proponent shall not transport the mineral through tiger dispersal route and it should be routed through other side without causing traffic, pollution and road kill in the tiger reserve area.
- iv. Although the site is not located in any classified corridor, tigers move in the landscape randomly through the agriculture and open areas. Therefore, the Project Proponent should have site-specific assessment of tiger movement and shall ensure that there is no disturbance on the western area towards Ken River. Further, based on site assessment, local level mitigation plan shall be in place.

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- v. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of Tigers in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for Tigers and to avoid Man-Animal conflict.
- vi. Biodiversity management plan, including restoration and carbon offset scheme shall be included in the mine plan and operation.
- vii. The project proponent needs to submit the quarterly compliance report to the State Forest Department/NTCA/RO w.r.t monitoring of the movement of tiger in the study area and their effectiveness of implementation of mitigation plan.
- viii. The Project Proponent needs to provide the apprenticeship to the local people. The data and the outcome should be maintained for the same imparted to the local people.
- ix. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- x. All other terms and conditions mentioned in the EC letter dated 31.08.2020 shall remain unchanged.

1.4 Majhgawan Diamond Mine, Panna of M/s NMDC Ltd. with total excavation of 13.90 LTPA [ROM Kimberlite Ore @ 8 LTPA and Overburden removal @5.90 LTPA] for production of 1.00 lakh carats of Diamonds per annum in the mine lease area of 113.332 Ha, located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh -[F.No: J-11015/120/2018-IA-II(M), Proposal No:IA/MP/MIN/442288/2023, Consultant: M/s Ecomen Laboratories Ltd] - Revalidation of EC under Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018 – Environmental clearance (EC)

The instant proposal is for mining of Diamond in Majhgawan Diamond Mine with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] in the mine lease area of 113.332 Ha (Main Lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh.

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2. Observation and Recommendation of the EAC: -

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

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- i. The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- ii. The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- iii. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

1.5 Majhgawan Diamond Mine, Panna of M/s NMDC Ltd. for 0.72 LTPA of over burden removal and Processing of Kimberley ore (8 LTPA) for production of 1.00 lakh carats of Diamond per annum with the mine lease area of 162.631 Ha (Supplementary Mine lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh – [F.No: IA-J-11015/121/2018-IA-II(M), Proposal no:IA/MP/MIN/442291/2023; EIA Consultant: M/s. Ecomen Laboratories Private Limited] - Revalidation of EC under Ministry's Notification vide S.O. (E) 1530 dated 06.04.2018

The instant proposal of M/s NMDC Ltd. is for mining of Diamond in Majhgawan Diamond Mine for 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamond per annum in the mine lease area of 162.631 Ha (Supplementary mine lease), located at Village Majhgawan, District Panna, Madhya Pradesh.

2. Observation and Recommendation of the EAC: -

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

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The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- ii. The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- iii. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

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Day 2: 22nd September, 2023 (Friday)

2.1 Obulapuram Iron Ore Mine of M/s Sai Balaji Minerals with production capacity of Iron Ore: 99,789 Tons/Annum in the mine lease area of 4.003 ha, located at Sy.No: 370, Sy.No: 58/P Of Obulapuram Village, D-Hirehal Mandal, Anantapuram District, Andhra Pradesh – [Proposal No: IA/AP/MIN/423323/2023, File.No: IA-J-11015/5/2023-IA-II(NCM); EIA Consultant: M/s Ecomen Laboratories Pvt. Ltd] – Terms of Reference (SOP Violation dated 07.07.2021)

The instant proposal is for mining of Iron Ore in Obulapuram Iron Ore Mine of M/s Sai Balaji Minerals with production capacity of Iron Ore: 99,789 Tons/Annum in the mine lease area of 4.003 ha, located at Sy.No: 370, Sy.No: 58/P Of Obulapuram Village, D-Hirehal Mandal, Anantapuram District, Andhra Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 15°02'56.85605"N - 15°03'09.41610"N and Longitude: 76°51'31.93150"E - 76°51'42.96087"E and falls under the Survey of India Toposheet No: 57 A/16 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the instant proposal attracts the general conditions as the Interstate boundary of Andhra Pradesh and Karnataka is located at a distance of 0.6 km from the mine lease area and appraised at the Central level.

iii. Details of Mine lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Grant of Mine Lease vide G.O Ms.No 158	20.06.2007	Iron Ore (Major Mineral)	20 years	Government of Andhra Pradesh	4.046 Ha – as per Lease 4.003 Ha – as per DGPS (10.0 Acres)

iv. Details of execution of mine lease:

S. No	Details of grant of	Period of Grant	Name of	Mine

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	Mine Lease deed execution	From	To	the Mineral	lease area in Ha
1	Proc: 3272/ML/07, Dated: 22.09.2007	22.09.2007	21.09.2027 (deemed extension upto 2057)	Iron Ore	4.046 Ha – as per Lease 4.003 Ha – as per DGPS

v. Land Use/Land Cover of the Mine Lease Area:

Private land	Nil
Government land	4.003
Forest land	Nil
Total Mining lease area (MLA), ha	4.003
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

vi. Mining plan details:

Review of Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	AP/ANP/MP/Iron ore-12/Hyd
	Date	23.08.2022
	Mineral & (Major/Minor)	Iron Ore – Major Mineral
	Mine Lease Area, Ha	4.046 Ha – as per Lease 4.003 Ha – as per DGPS Survey
	Validity	2026-27
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mining – Mechanized	
Drilling/Blasting	Yes	
Geological Reserves	1797225 tonnes	
Mineable Reserves	1195671 tonnes	
Life of mine	6 years	
Mine Bench Height & Bench Width	6 x 6	
No. of Mine Benches	Nil	
Existing Depth, m bgl	Nil	
Ultimate Depth of Mining, m bgl	4	
Ground Water Table, m bgl	60	
Details of ground water intersection	Nil	
Individual bench slope	45 ⁰	
Overall pit slope	60 ⁰	
Details of existing/ proposed Crusher	Nil	
Mineral Beneficiation	Nil	

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RoM output size	Boulders
Transportation details including capacity of dumper/tipper, mode of transport and distance	1. 2 Back Hoe/Excavator (0.9M ³) 2. 3 Dumpers (10tons capacity) 3. 1 Dozer (1.2 M ³)
Generation of Topsoil/OB & its Management during plan period & conceptual period	Plan Period: Overburden: 272740 tons 1255 m ³ of topsoil will be generated
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	241145 m ³ of waste generated. 0.70 ha will be used for Dumping as Approved mining plan.

vii. Water requirement:

Total water requirement	10.0 KLD	Freshwater	10KLD
		Treated water	
Source	Initially, Groundwater till 5 years and later from rain water harvested from the excavated pits.		

viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Village	Obulapuram	2.1 km towards SSW
Town	D.Hirehal	5km towards SSW
Highway	NH-150A (Rampura-Bellary)	500m towards East
Interstate Boundary	AP-Karnataka	700m towards NE as per Toposheet
Railway Station/Railway line	Railway line (Bellary Rayadurga) SW Railway Line	470m towards East
Water Bodies	Tungabhadra High level canal Allipura Reservoir	1.2 km, E 11 km towards North
Forest	Bellary R.F	1.2 km, NW

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Not Applicable
National Park	No	Not Applicable
Wildlife Sanctuary	No	Not Applicable
Elephant/Tiger Reserve	No	Not Applicable
Eco-Sensitive Zone(ESZ) /Eco-	No	Not Applicable

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Sensitive Area (ESA)		
Coastal Regulation Zone (CRZ)	No	Not Applicable
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	No	Not Applicable
Wildlife Conservation Plan	No	Not Applicable

x. Green belt/plantation details:

Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	0.840

- xi. The Project Proponent has submitted the letter from the Office of the Department of Mines and Geology vide Lr.No: 3272/ML/2007 dated 08.12.2022 with regard to permitted quantity from the 2007-08 to 2022-23 as mentioned below: -

S. No	Year	Permitted quantity in MTs
1	2007-08	510
2	2008-09	5865
3	2009-10	29410
4	2010-11	96270
5	2011-12	76500
6	2012-13	19210
7	2013-14	12988
8	2014-15	2499
9	2015-16	27515
10	2016-17	69878
11	2017-18	0
12	2018-19	0
13	2019-20	6
14	2020-21	6524
15	2021-22	19750
16	2022-23 (08.12.2022)	0
	Total	366925

- xii. If violation under SOP, dated 7th July, 2021. Point-Wise Compliance to SoP:

S. No.	SOP dated 07.07.2021			Compliance
1	S. No	Status of EC	Actions	Order to close its operation
	1	If no prior EC has been taken	Order to close its operation	
	2	If prior EC is available for existing/old unit	Order to revert the activity/ production to permissible limits	
	3	If prior EC was not	Restrict the	

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		required for earlier production level but is now required	activity/production to the extent to which prior EC was not required	
2	Action under Environment (Protection), Act 1986			The Ministry to initiate action under section 15 read with section 19 of the Environment (Protection) Act, 1986 against the Project Proponent
3	Appraisal under EIA Notification, 2006			As per Ministry's SOP dated 07.07.2021
4	Penalty Provisions for Violation Cases and applications a. For new projects: i. Where operation has not commenced: 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report; [Ex: Rs. 1 lakh for project cost of Rs 1 Cr] ii. Where operations have commenced without EC: 1% of the total project cost incurred up to the date of filing of application along with EIA/EMP report PLUS 0.25% of the total annual turnover during the period of violation. [Ex: For Rs. 100 Cr project cost and Rs.100 Cr total turnover, the penalty shall be Rs. 1 Cr + Rs 0.25 Cr = Rs 1.25 Cr]. b. For expansion projects: i. Where operation/ production with expanded capacity has not commenced: 1% of the total project cost attributable to the expansion, incurred up to the date of filing of application along with EIA/EMP report. ii. Where operation/ production with expanded capacity have commenced: 1% of the total project cost (attributable to the expansion activity), incurred up to the date of filing of application along with EIA/EMP report PLUS 0.25% of the total annual turnover (attributable to the expanded activity/capacity) involved during the period of violation.			The penalty shall be decided during the time of appraisal for EC.

- xiii. The Project Proponent has submitted an Affidavit in a non-judicial stamp paper of Rs 100 dated 02.01.2023 stating that as on date, the instant mine does not have

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a valid EC. The Project Proponent also undertaken to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of Common Cause versus Union of India and Ors., before grant of Terms of Reference (ToR)/ Environmental Clearance (EC).

xiv. Rehabilitation & Resettlement (R&R): No R&R is involved.

xv. Court case details: No Court cases are pending.

xvi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	50 Lakhs
Employment (No.s)	30

3. Observation and Recommendation of the EAC: -

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The instant proposal attracts the general conditions as the Interstate boundary of Andhra Pradesh and Karnataka is located at a distance of 0.6 km from the mine lease area. The Project Proponent has informed the EAC that railway line is located at a distance of around 500m on the eastern side from the mine lease area. Nearest Village is Obulapuram and it is located at a distance of about 2.0 km from the mine lease area. The Project Proponent also showed the old working pits within the mine lease area in the KML file. The balance life of the mine is 6 years. No National Park, Wildlife Sanctuary, ESZ/ESA within 10 km of the mine lease area. The mined out material will be transported by road through NH at a distance of 40km to Jindal and nearby mini steel plants and sponge iron plants. No village is passing through the transportation route.

The Project Proponent has informed the EAC that the mine lease deed was executed on 22.09.2007 and is valid upto 21.09.2027. A proposal was submitted to SEIAA, Andhra Pradesh during the year 2017. The EAC asked the Project Proponent that what is the reason for applying for ToR in the year 2023 after a gap of 6 years. The Project Proponent has informed the EAC no permits were issued by the Mining Dept., and Indian Bureau of Mines (IBM) has directed to obtain EC. The Project Proponent also informed the EAC that the State Pollution Control Board has directed to submit the copy of EC while submitting the application for renewal for consent for operation.

The mine commenced its operation in the year 2007 as no Environmental Clearance was required for mining of major minerals less than 5 Ha as per EIA Notification, 2006. The mine was in operation from the year 2007-08 to 2021-22. The Project Proponent also informed the EAC that as on date mine is not in operation. By Suo moto, the Project Proponent accepted that instant proposal is a violation case. The Project Proponent has shown the certified production details from the year 2007-08 to

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2021-22. The EAC observed that the Project Proponent has exceeded the production of the base year 1993-94 i.e., 510 MT from the year 2008-09 to 2016-17 and 2020-21 to 2021-22 and also the Project Proponent has been mining without EC. Thus the EAC opined that the instant proposal attracts the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors and violation of the EIA Notification, 2006. The EAC reiterated the Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006 stating that *"the percentage rates shall be halved if the project proponent suo-moto reports such violations without such violations coming to the knowledge of the Government either on inquiry or complaint"*. The EAC noted that as per Ministry's OM dated 07.07.2021, Clause 11: SOP for dealing with the violation cases if no prior EC has been taken then order to close its operation. In view of the above, the EAC asked the Ministry to close its operation and to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. The Project Proponent requested for exemption of public hearing as per Ministry's OM dated 12.11.2020. The EAC opined that the said OM does not applicable to this instant proposal.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 21-22 September 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein and as per Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Sai Balaji Minerals for mining of Iron Ore in Obulapuram Iron Ore Mine with production capacity of Iron Ore: 99,789 Tons/Annum in the mine lease area of 4.003 ha, located at Sy.No: 370, Sy.No: 58/P Of Obulapuram Village, D-Hirehal Mandal, Anantapuram District, Andhra Pradesh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The EAC asked the Ministry to close its operation and to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. Further, no consent to operate to be issued till the project is granted EC. The action initiated by the State Govt./State PCB, status of the same may be submitted to the Ministry.
- ii. The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP,

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followed by recommendations of the EAC and approval of the regulatory authority.

- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
- vi. Details of benefit accrued during the violation period along with capital cost of the project needs to be submitted.
- vii. The Project Proponent needs to submit the penalty provisions as per Ministry's SOP dated 07.07.2021 at the time of appraisal of EC.
- viii. The Project proponent needs to submit the map demarcating the railway line and railway boundary from the nearest working pit and the mine lease area.
- ix. The Project Proponent needs to submit the letter from the State Forest Dept of Andhra Pradesh and Karnataka regarding the distance of the location of the National Park, Wildlife Sanctuary, Tiger Reserves/ Tiger Corridor etc., along with the authenticated map and also the authenticated list of flora and fauna since the study area of the 10km radius of the buffer zone falling in the State of Andhra Pradesh and Karnataka (0.6 km).
- x. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, predominant downwind direction and at other sensitive receptors. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.

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- xi. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I(M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

2.2 Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa - [F.No: IA-J-11015/3/2023-IA-II(NCM), Proposal No: IA/GA/MIN/442593/2023, Consultant: M/s Mineral Engineering Services] – Environmental Clearance (EC)

The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in

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Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 15°34'20.518"N to 15°36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.

iii. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
16.03.2023	F.No: IA-J-11015/3/2023-IA-II(NCM) IA/GA/MIN/422323/2023	3-4 May, 2023	Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa	16.06.2023

iv. Details of Mine Lease:

- a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgoa Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a

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period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

v. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

vi. Details of Mining Plan:

Review and Mining Plan approved by Indian Bureau of Mines, Goa	Letter No.	No. MCDR-MPC 1 2023-GOA-IBM_RO_GOA
	Date	26.05.2023
	Mine Lease Area	478.5206 Ha
	Mineral	Iron Ore (Major Mineral)
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining without Drilling & Blasting	
Drilling/Blasting	Not Applicable	
Total Reserves and Resources	84.73 Million Tonnes	
Proved Mineral Reserve	36.071 Million Tonnes	
Life of mine	30 years	
Bench Height	7 m	
Bench Width	10 m	
Individual bench slope	70 ⁰	
Overall pit slope	<26 ⁰	
RoM output size	Less than 500 mm	
Crushing/Screening	Mobile Dry Crushing and Screening plant shall be available within the proposed mine to handle 4 MTPA of crude ore. The primary crusher will consist of 1 no. of Jaw crusher of capacity 120 TPH with an input feed of -500mm and shall produce output of -70 mm. It shall be followed by secondary crushers, 2 no.s of capacity 300 TPH and 200 TPH respectively. The input feed size shall be -70mm and output feed size obtained shall be -40mm. The Screening Plants of capacity -600TPH shall be installed where input the feed size shall be -70mm to obtain product of -40mm lumps & -10mm fines.	
Transportation details	ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total	

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	distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road.
Dumpers capacity	40 tonne (within mines)
Waste handling and Disposal	During the mining period, the waste generated by mining will be temporarily stacked within the mining lease area as surface dump and backfilled in the exhausted portion of the pits. The total waste to be generated during the plan period is about 69.85 million tonnes. An area of 6.7146 Ha shall be utilized for Dumps and Material stocking at the conceptual stage of mining.

vii. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.		

viii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North
Water Bodies	Asnora River	Touching lease boundary at one of the points
	Mayem Lake	0.46 km
	Mandovi River	2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idegah Shri Lairae Temple	Within the lease area 0.86 km
Caves/Fort	300m buffer from Lamgoa caves Khorjuvem Fort: 2 km	

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	Yes	Mayem Forest Common Boundary with the mine lease area

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		The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 km Kasarpal RF - 5.1 km Ambadgaon RF - 7.6 km
National Park/Wildlife Sanctuary, ESZ/ESA etc.,	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. - Madei Wild life Sanctury-14.105 km, E - Salim Ali Bird Sanctuary -10.553 km, SW - Bondla Wildlife Sanctuary -20.476 km, SE The Project Proponent also submitted the letter dated 22.02.2023 obtained from the Director (Environment) & Member Secretary, Goa-SEIAA stating that the Authority on perusal of Draft Zonal Master Plan for Eco-Sensitive Zones of Goa 2022 noticed that Eco Sensitive Zones declared by the Ministry of Environment & Forest in the State of Goa covers six Talukas such as Sattari, Dharbandora, Ponda, Sanguem, Canacona and Quepem, Bicholim taluka is not included in Draft Zonal Plan and it is not part of Eco Sensitive Zones. It is also clarified that Block-I Bicholim Mineral Block of Vedanta Ltd is also not a part of any Eco Sensitive Area.
Schedule-I species	Yes	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: 5/FCA/GEN/F&F/DCFN/TECH/2022-23 dated 04.04.2023 with regard to list of Flora and Fauna species present in core and buffer zone. The following Schedule-I species are found in the study area such as 1 Common leopard (<i>Felidae</i>) 2 White-bellied Sea-Eagle(<i>Accipitridae</i>) 3 Indian Peafowl (<i>Phasianidae</i>) 4 Crimson rose- Butterfly (<i>Papilionidae</i>)

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Status of Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023. PP has submitted the copy of the acknowledgement from Chief Wildlife Warden.

x. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

xi. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	March, 2023 to May, 2023		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season		
Ambient Air Quality (no. of locations) and results	No. of Locations	Parameters	Results
	9	PM10	27.0 to 56.0 µg/m ³
		PM2.5	14.0 to 36.0 µg/m ³
		SO2	4.0 to 13.0 µg/m ³
		NO2	<4.0 to 18.0 µg/m ³
Noise level (no. of locations) and results	No. of Locations	Parameters	Results
	09	During Day Time [Leq dB(A)]	43.1 to 61.7
		During Night Time [Leq dB(A)]	35.9 to 49.3
Water Quality (no. of locations) and results	Surface water quality		
	No. of Locations	Parameters	Results
	07	pH	6.35 - 7.39
		TDS (mg/l)	72 - 11240
		Fluoride (mg/l)	<0.1
		Chloride (mg/l)	18 - 5620
		Fe (mg/l)	<0.05
		Dissolved Oxygen (as O ₂), mg/l	6.2 – 6.9
		Biochemical Oxygen Demand	<3.0

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		(as O ₂), mg/l	
		Chemical Oxygen Demand (COD) mg/l	22.0 – 26.0
	Groundwater Quality		
	No. of Locations	Parameters	Results
	10	pH	5.63 – 7.07
		TDS (mg/l)	20 – 150
Fluoride (mg/l)		0.1	
Chloride (mg/l)		5.0 - 19.0	
Soil Quality (no. of locations) and results	No. of Locations	Parameters	Results
	07	pH	5.38 to 5.78
		Electrical Conductivity (mohs/cm)	0.28 to 0.318
		Nitrogen (kg/ha)	200 to 275
		Phosphorus (kg/ha)	14.3 to 17.8
		Potassium (kg/ha)	230 to 263

xii. Public Hearing (PH) Details:

Advertisement for PH with date	07.07.2023 Regional: Bhangar Bhui, Herald, Lokmat & Free press journal (Mumbai Edition) News papers
Date of PH	11/08/2023
Venue	Narayan Zantye Multipurpose Sports Complex, Sarvan, Bicholim, Goa
Chaired by	District Collector, North Goa
Main issues raised during PH	Pollution, impact on ponds, Support for Education, Health, Agriculture Development & Skill Development, Employment.
Budget proposed for addressing issues raised during PH	Rs 309.3 Lakhs

xiii. Rehabilitation & Resettlement:

R & R details	There is presence of habitation within ML Area at Mulgao and lamgao villages. Safety Buffer of 50m will be maintained from the habitations. No Rehabilitation & Resettlement Plan is proposed during life of mine.

xiv. Court case details:

Court Case	Yes
Additional information (if any)	<u>First Case (Suresh Zantye & ors. v. State of Goa & Ors.):</u>

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	1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extend it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order the matter has been disposed of by the HC on 17th July 2023 with a direction to the Petitioner to make a representation before the Government and the Government is to dispose of the same within four months. <u>Second Case (MSPL v. State of Goa & Ors.):</u> 1. WP 592 of 2022 2. The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to the extend it fails to include the essential facts and in the alternative to stay the auction. 3. Case status is pending 4. No adverse orders have been passed. 5. As per the last order the matter was listed on 01.09.2023. <u>Third Case (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors):</u> 1. PIL WP 2029/2023 (F)

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	2. PIL has been filed challenging state's decision to go ahead with the auction of the mining block. The said PIL also challenges the order dated 13.01.2023 which issues LOI to the successful bidder. The primary grievances of the petitioners are that village settlement are included within the mining blocks auctioned. Hence this PIL was preferred under Article 226 and 21 of the Constitution. Vedanta Limited is Respondent No. 3 in the aforementioned PIL. The matter is listed for first hearing on 25.09.23.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will comply to the directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking of Project Proponent	The Project Proponent has submitted an undertaking stating that the Environmental Impact Assessment Report of Block-1 Bicholim Mineral Block of M/s Vedanta Ltd was prepared by M/s Mineral Engineering Services, QCI/NABET Accredited EIA Consultant at Sr.No. 55 as per list of list of accredited consultant/organizations. The Project Proponent hereby undertaken that the information and data provided in the EIA report and submitted to the Ministry are factually correct and fully accountable for the same.
Consultant submitted an Undertaking vide letter dated 02.06.2023	This is to declare that the prescribed ToRs have been complied with and that the data submitted are factually correct in respect of EIA & EMP report prepared for Block-1 Bicholim Mineral Block of M/s Vedanta Ltd, Goa.

xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)

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Plantation	-	7.5
Environment monitoring	44	44
Air pollution control measures	20	300
Water Treatment	-	11
Erosion control /monsoon measures	-	221
Personal protective equipment	-	15
Maintenance of fire protection systems	-	1.5
Environment awareness & training	-	5
Health	8	16
Total	72	621

xvii. Details of project cost and employment:

Particulars	(Rs. In lakhs)
Project Cost	25000 Lakhs
Employment	716 no.s

3. Observation and Recommendation of the EAC:-

The Project Proponent and the Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and informed the EAC that there are two habitations such as Mulgao and Lumgao and schools are located within the mine lease area. Two schools are located in the Mulgao Village. One school is located at a distance of 138m from the Ultimate Pit Limit (UPL) and the other school is located at a distance of 190m from the Ultimate Pit Limit (UPL). No drilling and blasting is involved. Green barriers are maintained to prevent it from the environment hazards. Tributary of Asnora River is touching the mine lease area on the western side. It has been observed that area between river & bottom pit 5 is approximately 6m AMSL which obstructs the flow of water between them, even the high flood condition and at the place where river is touching the block boundary, it is 10.93m AMSL. Hence, even during high flood level, river will not interact with the pit water. The EAC noted that there are few temples, caves and fort are present in the vicinity of the mine lease area. There will be no surface dumping and will be backfilled concurrently and there are voids available for backfilling. Later on the Project Proponent has informed that the pits will be used as a settling ponds. The EAC noted that the Project Proponent is giving two contradictory statements. The EAC asked the Project Proponent to provide the design of the settling ponds in different pits.

The Project Proponent has informed the EAC that Block-I Bicholim block is an old mine and it was auctioned to Vedanta Ltd in the year 2022 and Letter of Intent (LoI) was granted on 13.01.2023. The EAC asked the Project Proponent that after the year 2018 whether any Environmental Clearance has been granted in the State of Goa. The

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Project Proponent has informed the EAC after the year 2018 there was no mining in Goa and this instant case is the first case for grant of Environmental Clearance. No forest land is involved in the mine lease area. The EAC noted that the Project Proponent has submitted that Mayem Forest common boundary is sharing with the mine lease area. The EAC was of the view that involvement of forest land within the mine lease area is not clear as there are two contradictory information given by the Project Proponent. The EAC also noted that in this regard, the Project Proponent has not submitted the letter from the Forest Dept. No National Park/Wildlife Sanctuary, ESZ/ESA etc., is located within 10km radius of the study area. An application for Groundwater withdrawal was submitted to Water Resource Department submitted on 19.06.2023. No Rehabilitation and resettlement is involved in this proposal.

The Project Proponent has informed the EAC that ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road. Width of the road is 7.0m. Twenty four hours continuous volume count was manually undertaken during May-2023. The EAC noted that the width of the road is not adequate. About 1205 no. of trips per day will be carried out. No. of working days will be 365. The EAC was of the view that when the rainfall is 3500 mm/year it will be difficult to carry out mining for 365 days. The Project Proponent has informed the EAC that 275 working days are considered for calculation of traffic load. The EAC asked the Project Proponent to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The EAC also asked the Project Proponent to strengthen the road and convert the road into concrete road.

The Project Proponent also informed the EAC that the predominant wind direction was from West to East. Wildlife Conservation Plan has been prepared and submitted to Chief Wildlife Warden (CWLW) on 19.06.2023 for approval with a budget of Rs. 50 Lakhs. At the end of conceptual stage, an area of 105 ha will be under green belt/ plantation. Eco restoration will be carried out in similar to the reclaimed activity carried out in Sanquelim mine. Public hearing was carried out on 11.08.2023 and a budget of Rs 309.3 Lakhs have been earmarked to address the concerns raised during public hearing. The EAC also noted that about 4708 written objections was submitted against the project during the public hearing. The Project Proponent has informed the EAC that the issues are same but the no. of objection letters were more in number and about 5183 no.s of letters were also received in support of the project. The EAC also noted that many complaints were received against the public hearing dated 11.08.2023. The EAC asked the Project Proponent to submit the video recording of the public

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hearing. There are three court cases at present regarding the auction process and one of the court case was disposed on 17.07.2023 and will abide the directions of the Hon'ble High Court. Other two cases in the matter of MSPL v. State of Goa & Ors. in WP 592 of 2022 and in the matter of Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors. in PIL WP 2029/2023 (F) are pending before the Hon'ble High Court and no adverse orders has been passed.

The Department of Mines and Geology, Goa was invited as a special invitee to discuss the present status of mining in Goa. The Deputy Director has informed that the State Govt. is looking positive to restart the mining operations in Goa. Besides 10% DMF, there is also a scheme called Goa Iron Ore permanent fund wherein 10% of the sale value of the mineral will be spent towards community based activities as per the direction of the Hon'ble Supreme Court. The State Govt. has put up a scheme for approval before the Hon'ble Supreme Court in line with Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) Scheme. This fund has to be kept for prosperity. The report with regard to illegal mining will be obtained from the SIT and will be provided to the Ministry.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the handling of waste of 25.162 MTPA will be more than the Iron Ore production capacity of 3.0 MTPA. The EAC was of the view that the pollution potential will be more in handling of waste. The EAC not convinced with plan for backfilling and with the design of settling ponds as the annual rainfall is projected as 3500 mm/year. The EAC observed that the instant mine is located in dense vegetation area. The EAC also noted that the mine lease area is located close to the proximity of the habitations, school, forest (Mayem common boundary), river, temples, caves and fort. The EAC also observed that the Project Proponent has not properly worked out the traffic load. Many litigations were received against the public hearing/project. Further, the EAC also noted that mines were not in operation in Goa from the year 2018 and this instant proposal is a first case for grant of Environmental Clearance (EC) under auction after 5 years. Thus there is a need to ascertain the present scenario and ground reality with regards to handling of waste, settling ponds, location of waste dump w.r.t habitation, school and river, other surface features as forest (Mayem common boundary), temples, caves and fort, mineral transportation route and traffic congestion. The EAC was of the view that a site visit needs to be conducted by a sub-committee comprising of EAC Members and officers from MoEF&CC. The EAC opined that the Ministry may constitute a sub-committee and submit its report to enable the committee to take a decision on the proposal. Therefore, the EAC **deferred** the proposal for want of following additional information: -

- i. The site visit report of the subcommittee.

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- ii. The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.
- iii. The Project Proponent needs to submit the design of settling ponds by considering the annual rainfall, catchment area and its discharge.
- iv. The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road into concrete road.
- v. Since the mine lease area is sharing the Mayem Forest common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.
- vi. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?
- vii. The Project Proponent needs to submit the video recording of the public hearing.

2.3 Chettichavadi Jaghir Magnesite and Dunite Mine of M/s. Dalmia Bharat Sugar and Industries Limited for Total Excavation of 1.4 million Tonne per annum (MTPA)/ [including 0.06 million tons of Magnesite, 0.12 million tons of Dunite, Waste, O.B, Inter Burden, Top Soil etc.] in the mine lease area of 449.364 ha, located at Chettichavadi Village, Salem Taluk, Salem District, Tamil Nadu - [File No: 23-227/2018-IA.III(V), Proposal No: IA/TN/MIN/241375/2018, Consultant: Aadhi Boomi Mining & Enviro Tech (P) Ltd] - Environmental Clearance (Violation)

The instant proposal is for mining of Magnesite and Dunite in Chettichavadi Jaghir Magnesite and Dunite Mine for Total Excavation of 1.4 million Tonne per annum (MTPA)/ [including 0.06 million tons of Magnesite, 0.12 million tons of Dunite, Waste, O.B, Inter Burden, Top Soil etc.] in the mine lease area of 449.364 ha, located at Chettichavadi Village, Salem Taluk, Salem District, Tamil Nadu.

2. The details of the project as ascertained from the document submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

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- i. The mine lease area is located between Latitude: 11°43'09.71"N to 11°44'36.233"N and Longitude: 78°07'23.268"E to 78°09'13.068" E. The mine lease area falls under the Survey of India Toposheet No: 58 I/2 and falls in Seismic Zone-III.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mine lease area is greater than 250 ha and appraised at the Central level.
- iii. The Project Proponent obtained Terms of Reference (ToR) vide ToR Lr.No: 23-227/2018-IA.III(V) dated 05.02.2021 for mining of Magnesite and Dunite in Chettichavadi Jaghir Magnesite and Dunite Mine for Total Excavation of 1.4 million Tonne per annum (MTPA)/[including 0.06 million tons of Magnesite, 0.12 million tons of Dunite, Waste, O.B, Inter Burden, Top Soil etc.] in the mine lease area of 449.364 ha under Ministry's Notification dated S.O 804(E) dated 14.03.2017.
- vii. The proposal was earlier considered in the 43rd EAC (Non-Coal Mining) meeting held during 14 -16 December, 2021 wherein the EAC deferred the proposal. The Project Proponent submitted the information on 11.03.2022 in Parivesh. But the Project Proponent did not comply to the observation of EAC and in view of the above additional details sought by the Ministry on 27.04.2022, 22.08.2022, 12.09.2022, 04.10.2022 and 22.11.2022 to provide the valid mine lease document and thereafter the Project Proponent submitted the information on 21.12.2022 in Parivesh. Accordingly, the proposal was reconsidered in the 9th EAC (Non-Coal Mining) meeting held during 17-18 January, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 01.09.2023 in Parivesh portal and accordingly the proposal was again reconsidered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023.

Based on observation of EAC in its EAC meeting held during 17-18 January, 2023 and compliance of observation of EAC made by PP are detailed below:

S. No	Observation of EAC in its meeting held during 17-18 January, 2023	Reply by Project Proponent
1	The project to be consider after deposit of demand raised by State authorities w.r.t Hon'ble Supreme Court common cause Judgment dated 2.08.2017. PP shall submit the proof of payment.	The Project Proponent has submitted that the State Mining Dept., Dept of Geology and Mining, Guindy while confirming the validity of the mine lease vide letter dated 09.12.2022 has directed to remit the EC violation amount of Rs 18.69 Crand Surface Right Compensation amount of Rs 79 Cr after the disposal of thefollowing cases which are pending before the Hon'ble High Court of Madras (1)W.P.No. 2517/2018-Surface Right

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		Compensation and (2) W.A.No 834&835/2020 -EC Violation. The Project Proponent has submitted that the said demands are being contested on the grounds amongst others that it has been imposed without opportunity of hearing. However, in case of similar demands to remit EC violation amount, Madurai Bench of Madras High Court by orders dated 18th Aug 2020 In W.P. (MD) No. 24463/2018 etc. batch has taken opposite view and held that such demands cannot be enforced without opportunity of hearing. Therefore, the matter has now been referred to larger bench to decide the said issue. The Writ Appeal before Madras High Court regarding demand of EC violation amount INR 11.44 Crore along with entire batch appeals from other ML holder on the same issue is posted for hearing on 12th Sep 2023. Further, a Writ Petition W.P 22888/2023 has been filed before Madras High Court on 27.07.2023 praying amongst others that MOEF&CC should not insist for pre-payment of INR 11.24 Crore and 7.44 Crore for grant of EC (compensation demanded by State Mining Dept. for mining without EC in light of Supreme Court Order In Common Cause, dated 2ndAugust 2017 in Writ Petition (Civil) No. 114 of 2014). The matter is pending and posted for hearing on 20thSeptember 2023. The Project Proponentreiterate herein that they will pay the demands upon final disposal of the matter.												
2	The Project Proponent needs to submit the details of all the court cases/show cause notices/ litigations in a chronological manner and its present status with the supporting court orders/ documents.	The Project Proponent has submitted the details of all pending court cases/show cause notices/litigations as on date and their present status with its supporting order/documents as given below in Table. <table><tr><th>S.No</th><th>Case Reference</th><th>Facts</th><th>Current Status</th></tr><tr><td colspan="4">MMRD</td></tr><tr><td>1</td><td>W.P.25518/2006 Madras HC</td><td>Since Mines and Geology Dept. was not disposing of the application for renewal of mining lease, Writ Petition No. 25518 of</td><td>The said order dated 17th August, 2006 still continues to be in force and the said W.P. No. 25518 of 2006</td></tr></table>	S.No	Case Reference	Facts	Current Status	MMRD				1	W.P.25518/2006 Madras HC	Since Mines and Geology Dept. was not disposing of the application for renewal of mining lease, Writ Petition No. 25518 of	The said order dated 17 th August, 2006 still continues to be in force and the said W.P. No. 25518 of 2006
S.No	Case Reference	Facts	Current Status											
MMRD														
1	W.P.25518/2006 Madras HC	Since Mines and Geology Dept. was not disposing of the application for renewal of mining lease, Writ Petition No. 25518 of	The said order dated 17 th August, 2006 still continues to be in force and the said W.P. No. 25518 of 2006											

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			2006, filed by Project Proponent Hon'ble Court granted an interim injunction in favor of the Project Proponent to operate the said mining lease under deemed extension in terms of Rule 24 A (6) of MCR 1960. Accordingly, in light of the interim relief granted by this Hon'ble Court, the Appellant continued its mining operations without any expansion and or modification.	is also pending as on date. Now State Mining Dept. issued letter dated 9th Dec 2022 hence this writ petition is now redundant.
		2	In terms of the Supreme Court Order dated the 22nd August 2017 in Writ Petition (Civil) No. 114 of 2014, Dist. Collector Salem raised a demand vide order 18th June 2019 directing Dalmia Bharat Sugar & Industries Ltd. (DBSIL), project proponent here to pay sum of INR 11.44 crore on the quantity of Dunite mined without EC for the period 1st April 2000 to 31st March 2018.	The said demand was challenged by the DBSIL before Hon'ble Madras High Court by WP No. 889 of 2020 wherein DBSIL. The said writ petitions were dismissed by Hon'ble High Court vide orders dated 12 th June 2020. The orders dated 12th June 2020 passed by Hon'ble High Court has been challenged by DBSIL vide Writ Appeal No 834 of 2020 which are yet to be Writ Petition No.29275 of 2016 Disposed by passing judgment dated 11th January 2022 by the Hon'ble Madras High Court with direction to PP to obtain EC.

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				taken up for hearing. In the meanwhile, Hon'ble Madurai Bench of Madras High Court in a different batch of writ petitions challenging demands by other District Collectors in terms of the said Supreme Court Order dissented with the orders dated 12th June 2020 on the ground that raising of demand Without opportunity of hearing may not be proper. The Madurai Bench of Madras High Court recorded its reasons for dissent in its order dated 19th August 2020 in W.P(MD) No.24463 of 2018 and etc. batch and requested Hon'ble Chief Justice of Madras High Court to place the matter before an appropriate bench. District Collector has also issued notice date 8th July 2020 for recovery of the amount. We have	

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			requested to keep the recovery proceedings in abeyance in view of the matter being sub judice	
		3	District Collector, Salem has also raised another demand vide order dated 08.07.2020 directing project proponent to pay sum of Rs.7.24 crore on the quantity of Magnesite mined without EC for the period 01.04.2000 to 31.03.2018.	Pending.
		4	W.P.No.2517 of 2018 before Madras H.C. (District Collector's demand of surface compensation of Rs.79,88,39,062 from 20.08.1966 till 31.10.2017)	Pending, stay order is in force
		5	W.P. 22888/2023 – Dalmia Bharat Sugar & Industries Ltd. Vs Secretary, MOEF&CC	Posted for hearing on 20 th Sept. 2023

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				should not insist for prepayment of INR 11.24 Crore and 7.44 Crore for grant of EC (compensation demanded by State Mining Dept. for mining without EC in light of Supreme Court Order in Common Cause, dated 22nd August 2017 in Writ Petition (Civil) No. 114 of 2014.	
			Environment Protection Act		
		6	Show cause vide Proceeding Letter No. SLM0006/DEE/TNPCB/SLM/RL/2014, dated 03.06.2014 by Tamil Nadu State Pollution Control Board u/s 19 of Environment Protection Act	Notices have been issued U/s 19 of Environment Protection Act to all the directors of the Project Proponents on the alleged ground of mining without EC during the period of deemed extension while the application for second renewal of mining lease was pending. Replies have been filed stating amongst others that mining was carried out under the provisions of deemed extension read with above mentioned order dated	Pending

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			17th August 2006 of Madras HC	
	7	Show Cause vide Proceeding Letter No. FEF/TNPBC/SLM/F/006 /20 by Tamil Nadu State Pollution Control Board U/s 19 of Environment Protection Act dated 4 th May 2020	Notices have been issued U/s 19 of Environment Protection Act to the Project Proponent. On the alleged ground of mining without EC during the period of deemed extension while the application for second renewal of mining lease was pending. Replies have been filed stating amongst others that mining was carried out under the provisions of deemed extension read with above mentioned order dated 17th August 2006 of Madras HC.	Criminal Case vide CC.No.388 of 2023 has been filed in Salem Judicial Magistrate Court No-4 by TNPCB against the DBSIL represented by Shri. P.G. Kalidass, Agent and Superintendent of Mines.
	Air Act & Water Act:			
	8	Show Cause Notice dated 5 th Feb 2013 under Water Act Show Cause Notice dated 5 th Feb 2013 under Air Act	Mining Activity without EC on renewal of mining lease. Reply to the notices have been filed.	Pending
	9	Mr. S. Sakthivel of Environmental Protection Anti-Pollution Group, Salem filed Original Application No: 213/2021 before NGT Chennai	It was alleged in the application that that mining is being carried out without renewal of ML and without EC. In the said application PP along with MOEF and	The said Original Application is finally disposed of vide orders dated 18 th May 2023 with direction to PP to obtain EC before starting ML operations. The said order

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				State Mining Dept. was arrayed as Respondents.	following observation: "the Environmental Clearance was required to be obtained from the year 1994" (<i>vis-à-vis mining project of the Applicant herein</i>). We have moved a Review Application No. 14/2023 for correction of the said observation because under 1994 Notification EC was required for new projects. The mining projects which were existing in 1994, required EC at the time of expansion or renewal of ML. In the said Review Application, we have not sought any change in the directions to PP to first seek EC from MOEF. The matter is to listed on 12 th Sep 2023.
3	The Project Proponent needs to submit the status of the credible action to be initiated by the State Govt. against the Project Proponent under the section 19 of E(P)A, 1986 in reference to the Ministry's letter dated 25.11.2020.	The Project Proponent has submitted that the credible action has been initiated by the State Govt./TNPCB under the section 19 of Environmental (Protection) Act, 1986 vide case no. CC No: 388/23 at Chief Judicial Magistrate Court no. IV, Salem dated 13.04.2023.			

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4	The Project Proponent needs to submit the revised letter from the Competent Authority, Forest Department clearly mentioning the type of Schedule Species in the study area of 10 km radius and accordingly the Project Proponent needs to submit the proof of submission of Wildlife Conservation Plan made to the Forest Dept with the timeline for implementation and the budget proposed.	The Project Proponent has submitted the revised letter from the Tamilnadu Forest Department vide letter no C.No. 228/2021 dated 13.02.2023 mentioning the details of flora, fauna, type of forest and list of schedule - I species in the study area. It has been also mentioned that there are 10 mammals, 6 birds and 2 reptiles are found under Schedule-I category. The Project Proponent also submitted that based on the revised letter issued by the Tamilnadu Forest Department vide letter dated 13.02.2023, Wildlife Conservation Plan has been submitted to the Tamilnadu Forest Department vide letter dated 09.03.2023 and proof of the same also submitted. The Project Proponent earmarked a budget of Rs 13.0 Lakhs towards conservation of Schedule I fauna.
5	The Project Proponent needs to submit the District Survey Report for Dunite to be approved by the SEIAA, Tamil Nadu.	The Project Proponent has submitted the letter issued by the SEIAA-Tamil Nadu vide Lr.No: SEIAA-TN/C.No.6013/2023 dated 06.06.2023 stating that SEIAA-TN is hereby endorsing the District Survey Report prepared for the mineral - Dunite by the Dept of Geology & Mining and approved by the District Administration, which establish that the mineral resource of Dunite is existing along with the magnesite in the mine lease hold area of an extent of 449.364 Ha in Chettichavadi Village. Salem District. Tamil Nadu owned by Dalmia Bharat Sugar and Industries Ltd.
6	The Project Proponent needs to submit the complete copy of the Approved Mining Plan dated 30.03.2021 in Parivesh.	The Project Proponent has submitted the copy of Review of Mining Plan including Progressive Mine Closure Plan for the period 2021-22 to 2025-26 in Parivesh portal.
7	The Project Proponent needs to submit the valid NABET Accreditation Certificate of the Consultant in Parivesh.	The Project Proponent has submitted the valid Certificate of Accreditation of the EIA Consultant Valid up to October 22, 2024.
8	The Project Proponent needs to submit the undertaking as per Ministry's OM dated 05.10.2011 and also the	The Project Proponent has submitted an undertaking vide letter dated 21.04.2023 to the effect that the conditions laid down in the Terms of Reference under violation case vide ToR letter dated 05.02.2021 for existing Magnesite and

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	Consultant needs to submit the undertaking as per Ministry's OM dated 04.08.2009.	Dunite mines in S.F.No. 6, over an extent of 449.364 ha of Chettichavadi Village, Salem Taluk and District, Tamil Nadu have been complied with in the final EIA & EMP report and the data submitted and information presented there in are true and correct to the best of my knowledge. The Consultant has submitted an undertaking vide letter dated 21.04.2023 stating that the Final EIA and EMP report has been prepared in compliance with the conditions laid down in the Terms of Reference under violation case vide letter dated 05.02.2021 including Ecological damage assessment, remediation plan, natural resource augmentation plan and community resource augmentation plan for obtaining EC from MoEF&CC, New Delhi for existing Magnesite and Dunite mines in S.F.No. 6, over an extent of 449.364 ha of Chettichavadi Village, Salem Taluk and District, Tamil Nadu. The head of the accredited consultant organization also confirmed that they shall be fully accountable for mis leading information mentioned in this statement.
9	The Project Proponent needs to reupload the EIA/EMP report along with the contents of the EIA/EMP report in Parivesh.	The Project Proponent has submitted that the Final EIA/EMP report along with the contents has been re-uploaded in Parivesh along with ADS reply.

3. Observation and Recommendation of the EAC: -

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent has informed the EAC that the Dept. of Geology and Mining, Guindy while confirming the validity of the mine lease vide letter dated 09.12.2022 has directed to remit the EC violation amount of Rs 18.69 Cr and Surface Right Compensation amount of Rs 79 Cr after the disposal of the following cases which are pending before the Hon'ble High Court of Madras (1) W.P.No. 2517/2018-Surface Right Compensation and (2) W.A.No 834&835/2020 -EC Violation. The Project Proponent has informed the EAC the demand will be paid subject to the outcome of disposal of the court cases. An affidavit dated 22.04.2023 has been submitted as per Ministry's OM dated 30.05.2018. The Project Proponent also informed the EAC that a Writ Petition W.P 22888/2023 has been filed before Madras High Court on 27.07.2023 praying amongst others that MOEF&CC should not insist for pre-payment of INR 11.24 Crore and 7.44 Crore for grant of EC (compensation demanded

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by State Mining Dept. for mining without EC in light of Hon'ble Supreme Court Order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014) in the matter of Common Cause versus UoI and others. Further, the Project Proponent also informed the EAC that no stay order has been imposed by the Hon'ble High Court.

The Project Proponent has informed the EAC that they are ready to submit the bank guarantee. The EAC reiterated the Ministry's OM dated 30.05.2018 stating that *"the Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors"*. The EAC opined that even if the Project Proponent submits the bank guarantee the purpose of granting EC will not meet the requirement as per Ministry's OM dated 30.05.2018. The matter is pending and posted for hearing on 15th October 2023. The Project Proponent has also informed the EAC that the credible action has been initiated by the State Govt./TNPCB under the section 19 of Environmental (Protection) Act, 1986 vide case no. CC No: 388/23 dated 13.04.2023 at Chief Judicial Magistrate Court no. IV, Salem. The matter is listed on 11.10.2023.

The Project Proponent has informed the EAC that based on the revised letter issued by the Tamilnadu Forest Department vide letter dated 13.02.2023, Wildlife Conservation Plan has been submitted to the Tamilnadu Forest Department vide letter dated 09.03.2023 and the Project Proponent has showed the proof of the same. A budget of Rs 13.0 Lakhs has been earmarked towards conservation of Schedule I fauna. The Project Proponent has also showed the letter issued by the SEIAA-Tamil Nadu vide letter dated 06.06.2023 stating that SEIAA-TN is hereby endorsing the District Survey Report prepared for the mineral - Dunite by the Dept of Geology & Mining and approved by the District Administration, which establish that the mineral resource of Dunite is existing along with the magnesite in the mine lease hold area of an extent of 449.364 Ha in Chettichavadi Village. Salem District. Tamil Nadu owned by Dalmia Bharat Sugar and Industries Ltd.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC was of the view that even if the Project Proponent submits the bank guarantee, the Project Proponent will not be able to comply to the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors" and will not be able to start the mine operation. Therefore, the EAC **deferred** the proposal and asked the Project Proponent to submit the proof of payment of Rs. 18.69 crore as per Dept. of Geology and Mining, Guindy letter dated 09.12.2022 for further consideration of the instant proposal before the EAC.

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2.4 Bathiya Limestone Mine of M/s AAA Resources Private Limited for mining of Limestone with production capacity of 4.0 MTPA, Topsoil: 0.41 MTPA, Waste/reject: 4.43 MTPA (Total excavation: 8.84 MTPA) along with the crusher of 1400 TPH in the mine lease area of 266.302 ha, located at Bathiya, Barahiya, Karaundi, Chapna and Tamoria Villages, Tehsil: Maihar, District: Satna, Madhya Pradesh – [F.No: J-11015/44/2020-IA-II(M), Proposal No: IA/MP/MIN/405276/2022, EIA Consultant: M/s Pragathi Labs & Consultants Pvt Limited] - Environmental Clearance (EC)

The instant proposal is for grant of Environmental Clearance of M/s AAA Resources Private Limited for mining of Limestone in Bathiya Limestone Mine with production capacity of 4.0 MTPA, Topsoil: 0.41 MTPA, Waste/reject: 4.43 MTPA (Total excavation: 8.84 MTPA) along with the crusher of 1400 TPH in the mine lease area of 266.302 ha, located at Bathiya, Barahiya, Karaundi, Chapna and Tamoria Villages, Tehsil: Maihar, District: Satna, Madhya Pradesh.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under: -

- i. The mine lease area located between Latitude 24°16'19.675" N - 24°18'46.795" N and Longitude 80°52'42.166" E - 80°55'18.769" E. The mine lease area falls under the Survey of India Toposheet No: 63D/15 and falls in Seismic zone-III.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category 'A' as the mine lease area is greater than 250 ha and appraised at the Central level.
- iii. The proposal was earlier considered in the 11th EAC (Non-Coal Mining) meeting held during 1-2 March, 2023 wherein the EAC after detailed deliberations deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 20.04.2023 in Parivesh portal. Accordingly, the proposal was considered in the 15th EAC (Non-Coal Mining) meeting held during 30-31 May, 2023 wherein the EAC again deferred the proposal for want of additional information. Then, the Project Proponent submitted the information on 05.09.2023 in Parivesh portal and accordingly the proposal was again considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023.

Based on observation of EAC, compliance of observation of EAC in its meeting held during 30-31 May, 2023 made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 30-31 May, 2023	Reply by Project Proponent

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1	The Project Proponent needs to submit the certificate from the Chief Wildlife Warden regarding movement of tigers in the study area.	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forest (Wildlife), Madhya Pradesh vide Letter no. SI.Va.Pra/Machi/GEN-506/77545 Bhopal, dated 23.08.2023 stating that the proposed mining area (2.63 km) is far from Compartment No.P-471 of Banshipur beat or Forest Range Maihar. Near proposed site of the forest range, no tiger movement has been observed for the last 10 years. On the basis of reports submitted by Divisional Forest Officer, Forest Division, Satna and Chief Conservator of Forest, Rewa Division, this office is agreed and forwarding the letter for necessary action.			
2	The Project Proponent needs to verify whether the instant mine lease area falls in the Greater Panna Landscape delineated by the Wildlife Institute of India (WII).	The Project Proponent has submitted the map showing the mine lease area in the Greater Panna Landscape delineated by the Wildlife Institute of India (WII).			
3	The Project Proponent needs to submit the approved action plan to monitor the movement of tigers in the vicinity of the mine lease area from the Chief Wildlife Warden.	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forest (Wildlife), Madhya Pradesh vide Letter no SI.M.Pra/Machi/Mines-157/7493 Bhopal dated 17.8.2023 stating that an action Plan has been prepared by Shri Ravikant Mishra, IFS (Retired) for conservation of Flora and Fauna in the 10 kms of limestone mining lease area (266.302 ha.) of M/s AAA Resource Pvt Ltd covering Village Bathiya, Barahiya, Karaundi, Capana and Tamoriya, Tehsil Maihar, District-Satna. The Action Plan has been prepared on the basis of condition mentioned in SI.No.1 of the decision taken in 15th meeting of Expert Appraisal Committee of Specialists. The Action Plan has been submitted along with recommendation letter of Divisional Forest Officer, Common Forest Division, Satna. As per recommendation letter of the Divisional Forest Officer, Common Forest Division, Satna a proposal for action plan for wildlife conservation for monitoring the tigers' movement within vicinity of 10 km of mining area an amount of Rs.16.50 lacs has been estimated, bifurcation are as under:- <table border="1"> <thead> <tr> <th>S. No</th><th>Item of Work</th><th>Amount</th></tr> </thead> </table>	S. No	Item of Work	Amount
S. No	Item of Work	Amount			

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				(Rs. In Lacs)										
		1	Procurement of Camera Trap (20 Nos.)	4.0										
		2	Procurement of Batteries Memory Cards etc for Camera Trap	0.50										
		3	Procurement of hand held GPS, binoculars	2.0										
		4	Procurement of Mobile Phone	1.0										
		5	Creation of pug-mark impression pads in forest road, near water holes and other places as per requirement	2.0										
		6	Awareness generation, workshop of mine staff, workers, JFMC members & students by forest department	5.0										
		7	Honorarium and wages for camera installation in field and its data collection	2.0										
			Total	16.50										
		In this regard, after final approval from India Government/State Government and before commencement of the mining and within time limit and according to amended action plan for wildlife management allocated fund Rs.16.50 lacs in one time is to be deposited in Saving Bank Account No.10571048460 (IFSC: SBIN0001308), Main Branch of State Bank of India, TT Nagar, of Madhya Pradesh Tiger Foundation Society.												
		The Project Proponent also submitted the copy of the action plan to monitor the movement of Tigers in the vicinity of the Bathia mining lease area.												
4	The Project Proponent needs to revisit the action plan for the purpose of local employment in a more specific manner by mentioning the skills to be imparted, physical and financial targets and timelines.	The Project Proponent has submitted the revised action plan for Skill development as given below in table: - <table><tr><th>S.No</th><th>Skill Development program</th><th>Through</th><th>Number of Candidates</th><th>Total Course Fee for a Course</th></tr><tr><td>1</td><td>Stitching & Designing course/</td><td>NSDC / ITI</td><td>37</td><td>2,25,680</td></tr></table>			S.No	Skill Development program	Through	Number of Candidates	Total Course Fee for a Course	1	Stitching & Designing course/	NSDC / ITI	37	2,25,680
S.No	Skill Development program	Through	Number of Candidates	Total Course Fee for a Course										
1	Stitching & Designing course/	NSDC / ITI	37	2,25,680										

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			Fashion Design and Technology			
		2	Data Feeder Consignment tracking Warehouse - Logistic	NSDC / ITI	30	1,85,360
		3	COPA (Computer Operator & Programming Assistant) / CHNM (Computer Hardware and Network Maintenance)	ITI	30	1,85,360
		4	MRAC (Mechanical, Refrigerator & Air Condition)/ Electrician/ Fitter etc.	ITI	25	2,94,000
		5	Carpenter / Mason / Diesel Mechanic etc.	ITI	45	2,78,040
		6	Heavy Vehicle Driving	Ashok Leyland Institute of Driving Training and Research, Devardha, MP	90	9,93,000
					257	21,61,440
		Contingency Amount @15%				3,24,216
		Total Budget				24,85,656
		Say (Rs. Lakh)				25.00
5	The Project Proponent needs to submit the map demarcating the land to be purchased and already purchased land. PP also needs to submit the phase wise plan for land acquisition.	The Project Proponent has submitted the map demarcating the purchased land and non-purchased land within the mine lease area. The land will be purchased for mining as per approved mining plan. It is planned to obtain surface rights of the land required for first five-year mining operations within three years in a phased manner. The balance land will be purchased subsequently.				
6	The Project Proponent needs to submit the copy of	The Project Proponent has submitted the copy of order dated 06.07.2023 pronounced by the Hon'ble				

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	withdrawal petition filed on 09.05.2023 before the Hon'ble High Court of Madhya Pradesh at Jabalpur Bench.	High Court of Madhya Pradesh at Jabalpur Bench stating that for the reasons assigned in the application, I.A No. 6358 of 2023 seeking withdrawal of the writ petition is allowed. The writ petition is accordingly dismissed as withdrawn with liberty to file a fresh petition.
7	The Project Proponent needs to submit the undertaking as committed before the EAC towards promotion of solar energy.	The Project Proponent has submitted an undertaking vide letter dated 29.08.2023 stating that the daily average load of electrical installation including crusher at mines will be 477 kW. Further, the proposed capacity is in line with Gazette Notification no. RG-39(I) dated 22.07.2022 of Madhya Pradesh Electricity Regulatory Commission (MPERC), 2022 which permits eligible consumer to install renewable energy generating systems under the net metering arrangements upto 500 kW capacity. The Project Proponent undertakes to install solar energy with capacity of 500 kW within two financial years.

iv. Details of Terms of Reference (ToR):

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
30.09.2020	IA/MP/MIN/176767/2020 J-11015/44/2020-IA-II(M)	November 23-25, 2020&9-11 and 14-15 June, 2021	Terms of Reference to M/s AAA Resources Private Limited for Bathiya Limestone mine with Total excavation: 8.84 MTPA, Limestone: 4.0 MTPA, Waste/reject: 4.43 MTPA Topsoil: 0.41 MTPA in the mine lease area of 266.302 Ha at Bathiya, Barahiya, Karaundi, Chapna and Tamoria villages, Tehsil: Maihar, District: Satna, State: Madhya Pradesh.	02.07.2021

v. Details of Mine Lease:

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S.no	Grant of PI/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Letter of Intent No F3-8/2011/ 12/1	03.01.2018	Limestone	50 years	Govt. of Madhya Pradesh	266.302
2	Grant of mining lease Lr No AF 3-8/ 2014/ 12/1	13.01.2021	Limestone	50 years	Govt. of Madhya Pradesh	266.302

Details of Mine Lease Deed:

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Mining Lease deed executed on 28/01/2021	28/01/2021	27/01/2071	Limestone	266.302

vi. Land Use/Land Cover of the Mine Lease Area:

Private land	258.230 ha
Government land	8.072 ha
Forest land	Nil
Total Mining lease area (MLA)	266.302 ha
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

vii. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	MP/Satna/Limestone/MPLN/G-04/2020-21
	Date	16.09.2020
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	266.302
	Production capacity	4.0 MTPA
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized	
Drilling/Blasting	Spacing: 5.0 m Burden: 3.25 m Depth of hole: 8 m (Sub grade drilling 10% =0.8m) Charge per hole: 50 – 60 kg Powder Factor (t/kg): 5 – 6	

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	Dia. of hole: 115 mm
Geological Reserves	86.46 million tonnes
Mineable Reserves	33.96 million tonnes
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total excavation: 8.84 Million Tonnes Per Annum (MTPA) includes Topsoil: 0.41 MTPA; Waste/Reject: 4.43 MTPA; Limestone: 4.0 MTPA
Life of mine	12 years
Mine Bench Height & Bench Width	8 m and 15-30 m
No. of Mine Benches	7
Existing Depth, m bgl	Not applicable
Ultimate Depth of Mining, m bgl	55 m bgl in block-1, 30 m bgl in block 10
Ground Water Table, m bgl	Pre-monsoon 11.63 m bgl; post-monsoon 7.06 m bgl
Details of ground water intersection	Mine workings will intersect water table around 7.06 m during post-monsoon and 11.63 m during pre-monsoon.
Individual bench slope	80°
Overall pit slope	45°
Details of existing/ proposed Crusher	One crusher of 1400 TPH is proposed. The Project Proponent has submitted that the installation of crusher plant of 1400 TPH will start immediately after obtaining CTE and the installation work will be completed within 1 year.
Mineral Beneficiation	Not applicable
RoM output size	Max. 600 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The limestone after crushing will be dispatched by tipper trucks through road to cement plant located at Bharauli for captive use. Approximate distance is 27 km. Capacity of dumper is 40 tonnes. The ROM limestone will be crushed before being dispatched to the cement plant. Further, till the installation of crusher, sized limestone will be transported to cement plant for captive use.
Generation of Topsoil/OB & its Management during plan period & conceptual period	Top soil generation during plan period - 8,90,455 m ³ and during life of mine - 5.02 million m ³ . The same will be stored temporarily for future use in plantation / reclamation.
Generation of Mineral Rejects/ Waste & its Management during	During the first five years period, 27,53,100 m ³ of waste will be generated. The part quantity will be

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plan period & conceptual period	used for preparing protective bund, crusher ramp etc. and remaining will be stored in temporary waste dump. Upto conceptual period 36.70 million m ³ OB will be generated. Entire quantity will be used for backfilling of mine pits.

viii. Water requirement:

Total water requirement	412 KLD	Fresh water	412 KLD
		Treated water	Nil
Source	Ground water during initial years of operation.		
Permission for withdrawal/ intersection along with details of grant and its validity	Application has been submitted to CGWA for obtaining NOC vide application no. 21-4/1658/MP/MIN/2022 on 15/11/2022 and is in under progress. Water abstraction charges are paid and application is in advance stage of processing at CGWA, HQ. Presentation before CGWA committee made on 02ndMay 2023. PP also submitted the status of application submitted to CGWA.		

ix. Nearest village / town/ highway/railway station / water bodies:

Particulars	Particular's Name	Distance & Direction
Village	Tamoriya near block 1 and Barahiya near block 10	Adjacent
Town	Amarpatan (Block-1, Block-8 and Block-10)	5.8 km- E, 8.6 km-ENE and 9.0 km-W
Highway	Maihar - Amarpatan/Rewa road	0.1 km, N
Interstate Boundary	Uttar Pradesh	Approx. 67 km, N
Railway station / railway line	Maihar	11.6 km, W
Water bodies	Serainjinala Tamas/Tons river Bihar river Bakaulinala Pathananala	1.9 km, S 6.9 km, W 7.6 km, SE 8.0 km, N 9.2 km, WNW
	The Project Proponent has submitted that two small portions of the canal passing through the lease area will not be diverted. A safety barrier of 50 meters on either side of the canal will be left and plantation will be done on the safety barrier.	
Forest	Sirgo RF; Papra RF	8.2 km-NE; 9.2 km-SE

x. Presence of Environmentally Sensitive areas in the study area:

Forest	Land/Protected	Yes/No	Details of Certificate/letter issued by

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Area/Environmental Sensitivity Zone		the concerned Department mentioning the Lr. no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	PP submitted that there is no forest land within ML area. PP also submitted the letter from the Forest Dept. Satna, MP vide letter no. 2409 dated 04-03-2021 in this regard.
National Park	No	PP submitted the letter from PCCF (Wildlife and Chief Wildlife Warden, MP) vide Lrno. No./B.Pra/Ma.Chi/Mine-85/ 3211 dated 08-04-2021 stating that there is no Protected Area / Tiger Reserve / Sanctuary / Biosphere / Wildlife Corridor / Ramsar Site / Elephant Reserve / Eco Sensitive Zone within 10km radius and also submitted the authenticated map of 10km radius from the Forest Dept. in this regard.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No. and name of schedule-I species with authenticated letter)	No	PP submitted the List of Flora and Fauna authenticated by Forest Dept., Satna.
Wildlife Conservation Plan	No	Not Applicable
Additional information (if any)	The Project Proponent has submitted the action plan prepared by Sh. Ravikant Mishra IFS, CCF(Rtd), Bhopal to monitor the movement of tigers with participation of mine staff, workers, JFMC members, students and Forest Department.	

xi. Details of Green belt/plantation:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt:46.64 ha and 69,960 numbers Backfilled area: 134.85 ha and 2,02,275 numbers
Budget for green plant & plantation till the end of life of mine.	₹2.722 Cr.
Budget for nursery	Included in the above figure
Details of existing plantation and its survival rate	Not applicable
No. of tree cuts in the mine lease area and compensatory afforestation	Nil and compensatory afforestation is not applicable.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	46.64
50 m safety zone of nallah, roads, electric lines	
500 m safety zones of nearest habitation	

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villages	

xii. Baseline data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)			
Period of baseline data collection	December 2020 to February 2021		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter		
Predominant Wind direction (From)	North-West		
Ambient Air Quality (no. of locations) and results	10 locations Result summary: PM ₁₀ : 30.7 µg/m ³ - 61.7 µg/m ³ PM _{2.5} : 18.2 µg/m ³ - 36.9 µg/m ³ SO ₂ : 10.8 µg/m ³ - 18.1 µg/m ³ NO ₂ : 14.1 µg/m ³ - 24.8 µg/m ³		
Noise level (no. of locations) and results	10 locations Result summary: Day Time (L _{day}) noise level: 41.8 dB (A) - 55.6 dB (A) Night Time (L _{night}) noise level: 38.4 dB (A) - 52.8 dB (A).		
Water Quality (no. of locations) and results: 11 Locations (9 ground water and 2 surface water)	Parameters	Surface water (5 locations)	Ground water (5 locations)
	pH at 25°C	6.86 - 6.94	7.01 - 7.62
	Total Dissolved Solids, mg/l	-	371.5 - 960.1
	Chloride as Cl-, mg/l	48.6 - 61.2	86.5 - 282.6
	Total Hardness, mg/l	154.22 - 168.54	186.21 - 440.35
	DO, mg/l	5.6 - 6.1	-
	BOD, mg/l	less than 3 mg/l	-
	Fluoride as F, mg/l	0.4-0.5	0.6 - 1.2
	Sulphates as SO ₄ ,mg/l	31.8 - 32.6	34.6 - 112.5
Soil Quality (no. of locations) and results: 10 locations	Parameters	Observed Values	
	pH	4.92 - 7.02	
	Texture	Sandy clay to clay	
	Electrical Conductivity (µS/cm)	82.4 - 302.1	
	Organic Carbon (%)	0.19 - 0.46	

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	Available Nitrogen as N (Kg/Ha)	38.5 - 56.4
	Available Phosphorus (Kg/Ha)	38.6 - 66.9
	Potassium (Kg/Ha)	126.9 – 210.5
Hydro geological study and results	Hydrogeological investigations were carried out in the study area during 27-30 November 2020 and 22-24 April 2021. Mine workings will intersect water table around 7.06 m during post-monsoon and 11.63 m during pre-monsoon. The block is falling under safe category as per GWRA, 2020. The total rain water available from the rain water harvesting from roof top areas and open area works out to 0.017 MCM (0.007 MCM + 0.010 MCM), which can meet 14.05% of nondomestic requirements (0.122 MCM) of the project. Recharge due to settling-cum-recharge ponds works out to 0.003 MCM. An amount of 7,93,347.40 m ³ (0.793 MCM) of rainfall collected from the reservoir area will be available for recharge resulting in post mining water table recovery in the area.	
Traffic study (no. of locations) and results: 8 locations	PP submitted that about 334 trucks per day would be required for transportation of limestone from mine to the captive cement plant. The traffic contribution from mine to the road network will thus is the 'to and fro' movement of 668 vehicles per day, which is equivalent to 2004 PCU per day (taking a PCU factor of 3 per vehicle). With present level of traffic route in three locations and the predicted increase in existing traffic due to the project, adequacy of road/highway during operational phase of the mine has been estimated by comparison with the recommendations stipulated by Indian Road Congress (IRC). The total traffic load after implementation of the mining project will be well within the IRC stipulated maximum load of 35,000 PCU/day for a four lane highway with median separator (NH-7). The estimated peak traffic in terms of PCUs is compared with the stipulated standards by IRC for traffic capacity of the roads and it can be observed that the existing road network is adequate.	
Revalidation of baseline data	The Project Proponent has submitted that one-month fresh baseline data has been collected	

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during 09th March 2023 to 09th April, 2023 for the purpose of revalidation. PP also submitted that the ambient air quality has carried out in 10 locations, soil sampling in 10 locations, Surface water in 02 locations, Ground water in 09 locations and Noise survey in 10 stations within the study area.

Ambient Air Quality				
S.No	Parameters	Winter 2021	Summer 2023	Standards (µg/m ³)
1	PM ₁₀	55.1-61.7 µg/m ³	64.7-72.6 µg/m ³	100
2	PM _{2.5}	25.9-36.9 µg/m ³	34.7-46.3 µg/m ³	60
3	SO ₂	12.1-18.1 µg/m ³	15.9-21.3 µg/m ³	80
4	NO ₂	17.8-24.8 µg/m ³	21.6-28.3 µg/m ³	80

Location code	Winter 2021		Summer 2023	
	L _{day}	L _{Night}	L _{day}	L _{Night}
N1	47.6	43.8	52	40
N2	46.9	42.9	52	39
N3	50.3	47.1	56	42
N4	47.7	44.8	53	40
N5	45.3	41.9	50	38
N6	42.8	39.7	48	36
N7	55.6	52.8	61	49
N8	41.8	38.4	47	34
N9	47.2	44.1	53	39
N10	44.9	41.8	49	37
Standards Day Time dB (A):	Industrial: 75, Commercial: 65 Residential: 55, Silence: 50			
Standards Night Time dB (A):	Industrial: 70, Commercial: 55 Residential: 45, Silence: 40			

Surface Water quality			
S.No	Parameters	Winter 2021	Summer 2023
1	pH	6.86-6.94	7.10
2	EC	586.8-659.7	1310
3	DO, mg/l	5.6-6.1	4.9
4	Total Hardness, mg/l	154.2-168.5	380
5	Fluoride (mg/l)	0.4-0.5	0.9
6	Sulphate (mg/l)	31.8-32.6	74

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Ground Water quality				
S. No	Parameters	Winter 2021	Summer 2023	Standards
1	pH	7.01-7.62	7.0-7.6	6.5 to 8.5
2	Fluoride (mg/l)	0.6-1.1	1.0-1.1	1-1.5
3	Sulphate (mg/l)	34.6-112.5	45-107	200-400
4	EC	590-1560	656-1480	-
5	Total Hardness, mg/l	186.21-440.35	176-420	200 – 600
6	Chlorides, mg/l	86.5-282.6	105-225	250-1000
7	Nitrates, mg/l	3.9-22.5	11-28	45
8	Iron, mg/l	0.06-0.13	0.5-1.3	0.3

Soil quality			
S.No	Parameters	Winter 2021	Summer 2023
1	pH	6.76-7.96	6.7-7.8
2	Electrical Conductivity (µmhos/cm)	82.4-302.4	119-318
3	Organic Carbon	0.19-0.46	0.14-1.0
4	Nitrogen (kg/ha)	38.5-56.4	36.85-62.74
5	Phosphorus (kg/ha)	38.6-66.9	45.5-72.9
6	Potassium (kg/ha)	126.9-246.6	132.16-252.0

PP also submitted the test report for analysis of ambient air quality, noise level, water quality and soil analysis done by Pragathi Labs & Consultants Pvt. Ltd (Lab recognized by Ministry of Environment, Forests, Govt. of India).

xiii. Public Hearing (PH) Details:

Advertisement for PH with date (pl. mention name of major national daily and one regional vernacular daily newspaper)	DainikBhaskar, PatrikaSamachar, Nav Swadesh dated 28.05.2022 and 29.06.2022
Date of PH	20.07.2022
Venue	Near Gokul Gaushala, Village Bathiya, Tehsil Maihar, Dist. Satna, Madhya Pradesh.
Chaired by	Additional District Magistrate
Main issues raised during PH	Pollution control, Environment management, Blasting, Land compensation, Employment, Road transportation, beautification of ponds, drinking water, school,

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Budget proposed for addressing issues raised during PH	Rs. 122.50 Lakhs for 3 years

xiv. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that the total mine lease area is 266.302 ha, out of which 258.230 Ha is private land covering 5 villages Bathiya, Barahiya, Karaundi, Chapna and Tamoria. PP reported that there are 639 PAFs (only land losers). The land purchase for the proposed limestone project and the rehabilitation and resettlement of project affected families will be implemented under the provisions of the Central and State Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Acts, Rules & Policies. PP also submitted that willing seller and willing buyer will be adopted, where no land owner is compelled to sell their lands and whoever is ready, they will be paid adequate compensation based on mutually agreed, which would be more than the provisions suggested in the "Madhya Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015". Estimated total compensation will be around Rs.66.72 Crores. PAFs will be given preference in employment as per their qualification and skill set. The Project Proponent also submitted the activities for youths, women, farmers etc. for upgrading their skill set to make them employable, self-employed and / or increase their income level. The Project Proponent has submitted that the land will be purchased for mining in phased manner. It is planned to obtain surface rights of the land required for first five year mining operations within two years of start of operation. The balance land will be purchased in phases.

xv. Court case details:

Court Case no. and its present status	The Project Proponent has submitted the copy of order dated 06.07.2023 pronounced by the Hon'ble High Court of Madhya Pradesh at Jabalpur Bench stating that for the reasons assigned in the application, I.A No. 6358 of 2023 seeking withdrawal of the writ petition is allowed. The writ petition is accordingly dismissed as withdrawn with liberty to file a fresh petition.

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing XN 118806 that M/s AAA Resources Private Limited would comply with all the statutory requirement & judgment of Hon'ble Supreme

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	Court dated 2 nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking by Project Proponent in EIA/EMP report	The Project Proponent submitted an undertaking stating that the information and data provided in the EIA report and submitted to the Ministry are factually correct & Project Proponent is fully accountable for the same.
Undertaking by Consultant in EIA/EMP report	The Consultant submitted an undertaking vide letter dated 08.02.2023 stating that "M/s Pragathi Labs & Consultants Pvt Ltd have gone through the EIA&EMP report of AAA Resources Private Limited prepared by M/s Vimta Labs Ltd and observed that it has complied with all the prescribed Terms of Reference vide ToR letter dated 02.07.2021 and thus we hereby give our undertaking owning the contents and data provided in the report. Due to some uneventful situation M/s Vimta Labs Limited is unable to present the case, we are undertaking the responsibility of presenting the Final EC meeting before Expert Appraisal Committee, MoEF&CC".

xvii. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Rs in Crores)	Recurring cost (Rs in Crores/ annum)
Air pollution control and management	2.280	0.904
Water and wastewater control and management	0.614	0.328
Noise and vibration control and management	0.110	0.010
Soil conservation and solid waste management	0.210	0.027
Plantation & Green Belt	2.722	1.960
Total	5.936	3.229

xviii. Details of project cost and employment:

Particulars	(Rs. in Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	7.161
Project Cost	255.72
Employment	132 persons

3. Observation and Recommendation of the EAC: -

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent has informed the EAC that the letter has been obtained from the Office of the Principal Chief Conservator of Forest (Wildlife),

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Madhya Pradesh vide letter dated 23.08.2023 stating that near the proposed site of the forest range, no tiger movement has been observed for the last 10 years. On the basis of reports submitted by Divisional Forest Officer, Forest Division, Satna and Chief Conservator of Forest, Rewa Division, this office is agreed and forwarding the letter for necessary action. The Project Proponent has showed the map of the mine lease area in the Greater Panna Landscape delineated by the Wildlife Institute of India (WII) and also the levels of different corridor level. The Project Proponent also informed the EAC that mineral transportation route is not passing through the tiger dispersal route. The EAC asked the Project Proponent whether any mines are operating in the study area. The Project Proponent informed the EAC that many mines are operating in the study area.

The Project Proponent has informed the EAC that an action Plan has been prepared by Shri Ravikant Mishra, IFS (Retired) for conservation of Flora and Fauna in the 10 km of limestone mining lease area. A budget of Rs.16.50 lacs has been earmarked to monitor the movement of tigers and the same has been approved by the Chief Wildlife Conservator & Principal Chief Forest Warden (Wild Life), M.P vide letter dated 17.08.2023. Action plan for skill development plan has been revised and a budget of Rs 25.0 Lakhs has been earmarked for the same. The land required for operation of mining for the first five years will be acquired within 2 years. The Project Proponent has informed the EAC that Hon'ble High Court of Madhya Pradesh at Jabalpur Bench vide order dated 06.07.2023 pronounced that for the reasons assigned in the application, I.A No. 6358 of 2023 seeking withdrawal of the writ petition is allowed. The writ petition was accordingly dismissed as withdrawn with liberty to file a fresh petition. The Project Proponent also informed the EAC that as on date there is no court case pending against the project. The Project Proponent also undertakes to install solar energy with capacity of 500 kW within two financial years and also informed that the same may be completed in advance depending on the acquisition of the land.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 21-22 September, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance to Bathiya Limestone Mine of M/s AAA Resources Private Limited for mining of Limestone with production capacity of 4.0 MTPA, Topsoil: 0.41 MTPA, Waste/reject: 4.43 MTPA (Total excavation: 8.84 MTPA) along with the crusher of 1400 TPH in the mine lease area of 266.302 ha, located at Bathiya, Barahiya, Karaundi, Chapna and Tamoria Villages, Tehsil: Maihar, District: Satna, Madhya Pradesh subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. This Environmental Clearance will be valid upto the life of the mine i.e., 12 years.

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- ii. The Project Proponent needs to implement the approved action plan to monitor the movement of Tigers in the study area with an earmarked budget of Rs 16.50 Lakhs.
- iii. No Nallah should be disturbed or diverted at any stage of the mining operation.
- iv. As committed by the Project Proponent, installation of crusher plant of 1400 TPH shall start immediately after obtaining CTE and the installation work shall be completed within 1 year.
- v. The Project Proponent needs to carry out ground vibration study through reputed institute to determine maximum charge per hole and charge to be blasted per delay so that ground vibrations are minimized and kept within permissible safe limits fixed by DGMS. Necessary permission shall be obtained from DGMS for conducting blasting.
- vi. The Project Proponent shall monitor the ground induced blasting regularly for every blast performed and the values of “peak particle velocity” and “Air Over Pressure” shall be maintained below the permissible values prescribed by the DGMS, from time to time. The data needs to be maintained and submitted along with the six monthly compliance report.
- vii. In the mining area, adequate number of check dams, retaining walls/structures, garland drains and settling ponds should be provided to arrest the wash-off with rain water in catchment area.
- viii. The Project Proponent should install the continuous ambient air quality monitoring stations (CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- ix. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry’s Regional Office.
- x. The Project Proponent shall strictly adhere to the skill development plan and implement the same with an earmarked budget of Rs 25.0 Lakhs.

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- xi. As committed before the EAC, the Project Proponent needs to install solar energy with capacity of 500 kW within and the same may be completed in advance depending on the acquisition of the land.
- xii. The Project Proponent needs to make provision for permanent water sprinklers so as to reduce the water consumption. Further, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
- xiii. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. The dense plantation shall be carried out in the vicinity of the crusher. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.
- xiv. The Project Proponent needs to complete the entire 7.5 m peripheral plantation and safety barrier plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office.
- xv. The budget of Rs 122.50 Lakhs to address the concerns raised by the public in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xvi. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by

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MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

- xvii. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 5.936 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.
- xviii. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
- xix. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xx. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- xxi. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment and PP shall strictly adhere to the skill development plan for the work force.
- xxii. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of

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operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.

- xxiii. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.

Additional Agenda:

2.5 Bauxite mining project of M/s Panditrao Mines and Minerals Private Limited with production capacity of 0.80 MTPA in the mine lease area of 90.0 ha, located at Village Minche Budruk, Taluka-Budhargarh, District-Kolhapur, Maharashtra - Environmental Clearance (EC)

The instant proposal is regarding review of the minutes of EAC (Non-Coal Mining) held during 3-4 May, 2023 and requisition for revocation of the abeyance order.

2. Observation and Recommendation of the EAC:

The EAC noted that earlier the Project Proponent sought deferment on consecutive two EAC meetings held during 11-12 July, 2023 and 31st July & 1st August, 2023. The EAC also noted that again the Project Proponent sought deferment vide email dated 20.09.2023 for the third time and informed that the Mr. Pandit Rao who has been authorized as Nominated owner is not feeling well and requested to defer the proposal. Based on the request of the Project Proponent vide email dated 20.09.2023 the EAC **deferred** the proposal.

2.6 Report of the field visit undertaken by EAC sub-committee during 17-19 August, 2023 at Mukam Bauxite mine of M/s Chhattisgarh Mineral Development Corporation Ltd for mining of Bauxite with Total Excavation of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA] in the mine lease area of 110.563 Ha, located at Village: Mukam, Tehsil- Bodla, District- Kabirdham, Chhattisgarh – [File. No: IA-J-11015/37/2022-IA-II(NCM), Proposal No: IA/CG/MIN/417404/2023] – Environmental Clearance (EC)

The instant proposal is for grant of Environmental Clearance (EC) for mining of Bauxite in Mukam Bauxite mine of M/s Chhattisgarh Mineral Development Corporation Ltd with Total Excavation of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA]

Minutes of 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023

in the mine lease area of 110.563 Ha, located at Village: Mukam, Tehsil- Bodla, District- Kabirdham, Chhattisgarh.

2. The project was considered in the 12th EAC (Non-Coal Mining) meeting held during 21-22 March, 2023. During the meeting, the EAC observed that the Project Proponent/Consultant was unable to bring out the technical details before the EAC. The EAC felt that the issues related to Wildlife and measures for protection of tiger have not been properly addressed and due to sensitivity of the Phen Wildlife Sanctuary, BufferZone of Kanha National Park and Kanha-Achanakmar Tiger Corridor, it is necessary to ascertain the ground reality. The EAC was of the view that a site visit needs to be conducted by a sub- committee comprising of EAC Members, officers from MoEF&CC and representative of the National Tiger Conservation Authority (NTCA). The EAC opined that the Ministry may constitute a sub-committee and submit its report to enable the committee to take a decision on the proposal. Further M/s Chhattisgarh Mineral Development Corporation Ltd vide letter dated 20.07.2023 informed to the Ministry that validity of mine lease has been extended till 26.03.2024.

3. Accordingly, Ministry vide letter dated 31.07.2023 constituted a sub-committee comprising of the following members to ascertain the ground realities of the project.

1. Shri N K Vasu, EAC Member
2. Shri Bandi Ramchandra Reddy, EAC Member
3. Shri Pankaj Verma, Scientist E and MS, EAC (NCM), MoEF&CC
4. Dr Saurabh Upadhyay, Scientist C, MoEF&CC
5. Dr Purshottam R Sakhre, Scientist E, Representative of Regional Office at Nagpur.
6. Dr Anil Dashahre, Biologist, Representative of NTCA

The Committee members conducted a day-long field visit on 18.08.2023, visiting the mine site and proposed mining pits within the mine lease area. During the field visit, it was slightly raining. The project proponent gave a brief overview about the existing structure of the mine and the proposed course of action planned by them. The following officers from M/s Chhattisgarh Mineral Development Corporation Ltd along with consultant were present i.e Shri Upendra Kumar, DGM/ Agent Mines, Shri Deepak Gupta, Regional Officer, Bhanupratapur and Shri Sushil Kumar Chandraker, AGM Mines.

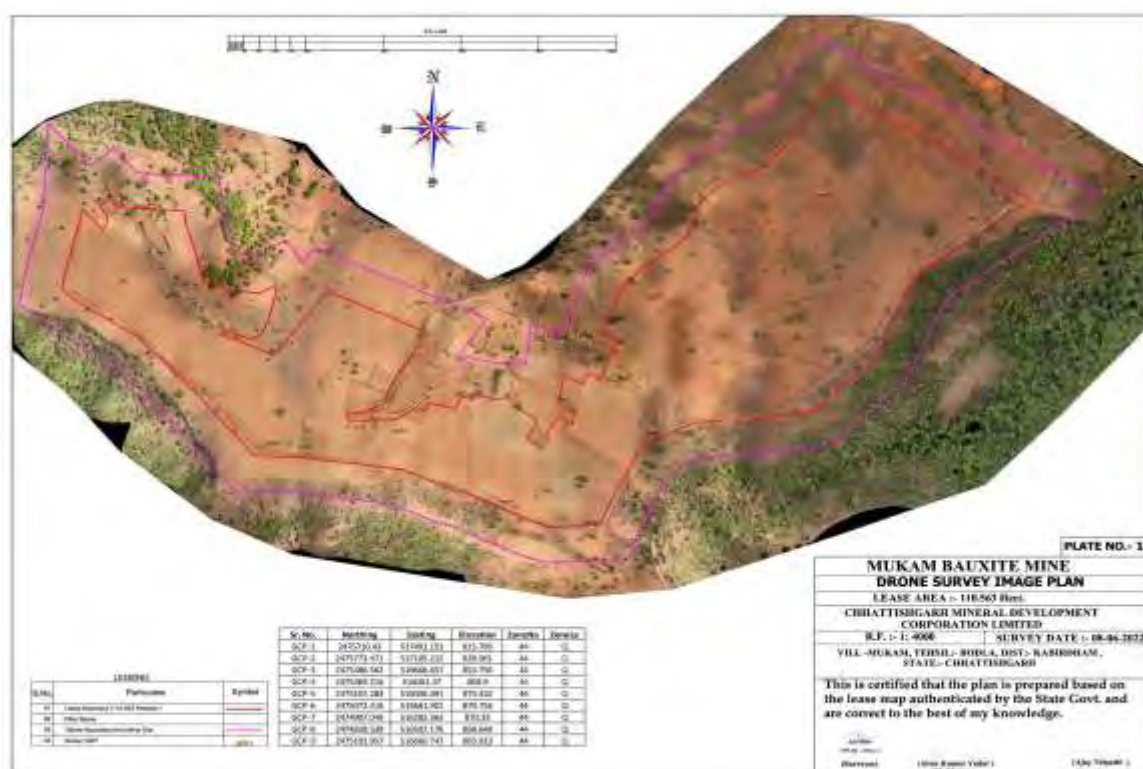
4. The sub-committee during the site visit observed the following:

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The proposed mine is located in village Mukam, Tehsil Bodla, District Kabirdham, Chhattisgarh. The village Mukam is adjacent to the site. The sub-committee found a school is situated near the mine site.

Proposed mining area with an extent of 110.0563 ha, is located at the Kawardha forest division adjoining Kanha Tiger Reserve (Phen Wildlife Sanctuary) and Boramdeo Wildlife Sanctuary.

The GPS coordinates were written on permanent point boundary pillars which is fixed on the ground. Team compared and verified the GPS coordinates recorded vis-à-vis coordinates mentioned on permanent points as well as GIS KML file of proposed mining area provided by user agency.



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Pillar no. 59 of project site



Village Mukam adjacent to mine site



Mine site near the the pillar number 68

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Issues of Phen Wildlife Sanctuary, BufferZone of Kanha National Park and Kanha-Achanakmar Tiger Corridor

The Project Proponent has informed that Phen Wildlife Sanctuary, Buffer Zone of Kanha National Park and Kanha-Achanakmar Tiger Corridor lies in the proximity of 10 km radius periphery of mines lying within the State of Madhya Pradesh which is about 5kms from the site of mines. The proposed mining area is situated at an aerial distance of approx. 2.18 Km from Eco sensitive zone boundary of Kanha Tiger Reserve and approx. 22.14 Km away from the Boramdeo WLS proposed site is outside of Eco sensitive zone of Kanha Tiger Reserve Madhya Pradesh.

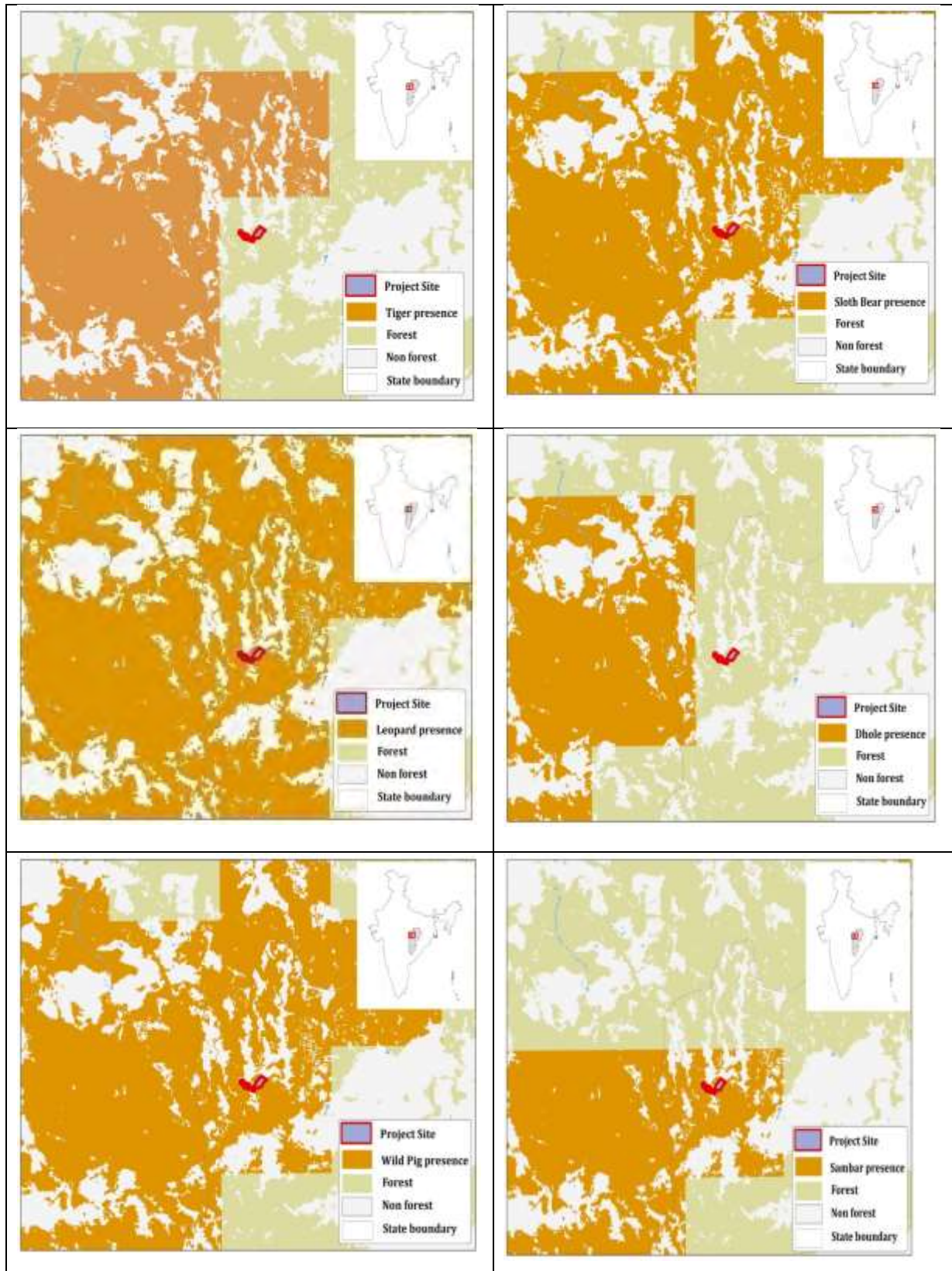
As per all India Tiger Monitoring exercise 2022 report, there is no presence of tiger, but presence of Leopard and other endangered Carnivores and herbivores is recorded in the proposed mining area.

After the GIS appraisal it has been verified that the proposed area falls with the Kanha- Achanakmar corridor (Figure-1) as per corridor/adjoining area plan of TCP of Achanakmar Tiger Reserve Chhattisgarh.



Figure-1: Map showing mining location in Achanakmar-Kanha-Bhoramdeo corridor

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Map showing tiger and other carnivore's/ Herbivores occupied area AITE 2022

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Mining activity observed at Mine site

The sub-committee observed that the mining activity has been carried out at the mine site area. The project proponent has informed that the same has not been done by the M/s CMDC. The sub-committee suggested for seeking comments from State DMG, if any illegal mining done by project proponent.



Mining activity observed at Mine site

5. Based on its observation, the committee recommended the following: -
 1. The Project Proponent shall undertake a survey to count the number of trees present in the lease area.
 2. The project proponent should take permission before felling of trees and shall submit the action plan for compensatory afforestation.
 3. During site visit, habitation and school are seen near the mine lease area. Project proponent should submit the precaution measures with an action plan.
 4. To maintain the dust free environment, the committee was of the opinion that project proponent should include provision for permanent sprinklers for the entire mineral transportation route.
 5. The Committee was of the opinion that the project proponent may explore the expand the road width and accordingly a plan needs to be submitted along with timeline and cost.
 6. The Project Proponent needs to submit the sequence of mining as the mine lease area involves an area of 67.401 ha of agriculture land and shall submit the action plan for restoration of ecology.

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7. The Project Proponent needs to submit the letter from the State Forest Dept, Madhya Pradesh regarding the distance of the Tiger Corridor and ESZ along with the authenticated map and authenticated list of flora and fauna since the study area of the 10km radius of the buffer zone falling in the State of Madhya Pradesh. PP also needs to submit the letter from the State Forest Dept, Chhattisgarh regarding the list of flora and fauna by indicating the type of Schedule species found in the study area.
8. The project proponent needs to seek comments from the State DMG, if any illegal mining done by Project Proponent or not.
9. The project proponent needs to provide the exact distance of school and mukam village near the mine lease area.

6. Observation and Recommendation of the EAC: -

The EAC deliberated on the observation and recommendations of the subcommittee. After detailed deliberations, the EAC agreed to the recommendations of the subcommittee.

List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	21 st Sept., 2023	22 nd Sept., 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes
2	Sh. Niranjana Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171	Member	Yes	Yes
4	Shri. Avijit Ghosh (CMD- Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P.P.Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes

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5	Shri. Bandi Ramchandra Reddy (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	Yes	Yes
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	No	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	No
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Vij Marg Rajinder Nagar, New Delhi - 110060	Member	No	No
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi Ind Stage, Mysore-570026, Karnataka	Member	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice-Chancellor	Sardar Patel University, Mandi H.P. 175001	Member	No	No
11	Shri V. K. Soni, Representative of India Meteorological Department	Government of India, Ministry of Earth Sciences, India Meteorological Department, Mausam Bhawan, Lodi Road, New Delhi – 110003	Member	Yes	No
12	Shri Yogesh Kale, Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhawan, Civil Lines, Nagpur - 440001	Member	Yes	Yes
13	Shri Upendra Rapolu/Shri Niaz Mohammed	Representative of Directorate General of Mines Safety	Member	Yes	Yes
14	Shri Abhir Hede, Deputy Director	Department of Mines and Geology, Govt. of Goa	Special Invitee	-	Yes
15	Shri Pankaj Verma	3 rd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes

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16	Dr. Saurabh Upadhyay	2 nd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Scientist C	Yes	Yes

F. No. IA-J-11015/3/2023-IA-II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
3rd Floor, Vayu Wing,
Jor Bagh Road, Aliganj
New Delhi-110003.

Dated: 9th October, 2023

OFFICE ORDER

Subject: Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa - Site Visit regarding

This has reference to the online proposal no. IA/GA/MIN/442593/2023 submitted by M/s Vedanta Limited which was considered in the 20th EAC (Non-Coal Mining) meeting held during 21-22 September, 2023 for grant of Environmental Clearance (EC).

2. The EAC (Non-Coal Mining Sector) in its 20th EAC meeting recommended that a site visit is to be carried out by sub-committee comprising of EAC Members and officers from MoEF&CC to ascertain the present scenario and ground realities of the project.

3. In acceptance of the recommendations of the EAC (Non-Coal Mining Sector) in its 20th EAC meeting, the Ministry hereby constitutes a sub-committee comprising of the following members who will undertake the site inspection and submit a report on its findings: -

1. Shri Niranjan Kumar Vasu, EAC (Non-Coal Mining), Member,
2. Shri Avijit Ghosh, EAC member, EAC (Non-Coal Mining), Member,
3. Shri Pankaj Verma, Scientist E & Member Secretary, EAC (NCM), MoEF&CC,
4. Shri Saurabh Upadhyay, Scientist C, MoEF&CC,
5. Shri A.Mohankumar, Consultant (Environment), MoEF&CC and
6. Representative from Regional Office of MoEF&CC, Bengaluru.

4. The sub-committee shall undertake the site visit during 29-31 October, 2023 and submit the report.

5. The TA/DA of this sub-committee nominated for undertaking the site visit shall be met by the Ministry of Environment, Forest and Climate Change as per existing rules and regulations.

6. This has been issued with the approval of the Competent Authority.

Yours faithfully,

Pankaj Verma

(Pankaj Verma)
Scientist 'E'

E-mail: pankaj.verma@nic.in

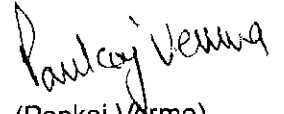
Copy to:

1. Shri Niranjan Kumar Vasu/ Shri Avijit Ghosh / Shri Saurabh Upadhyay/ Shri A.Mohankumar.
2. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore - 560034 (Email: rosz.bng-mef@nic.in) – with a request to nominate official for site visit and arrangement of vehicle for the site visit at Goa.

10/9/23, 4:18 PM

eOffice - Welcome to eOffice Solution

3. The Collector & District Magistrate, Collectorate Building, Opp. Municipal Garden, Panaji, Goa 403001
(Email: coln.goa@nic.in).
4. M/s Vedanta Limited, Sesa Ghor, 20 EDC Complex, Patto, Panjim, North Goa, Goa
(Email: mk.reddy@vedanta.co.in).
5. Guard File.


(Pankaj Verma)
Scientist 'E'



सत्यमेव जयते

Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Non-Coal Mining)



Minutes of AGENDA FOR 22ND EAC MEETING OF THE EXPERT APPRAISAL COMMITTEE (NON-COAL MINING SECTOR), SCHEDULED TO BE HELD DURING 14-15 NOVEMBER, 2023 THROUGH VIDEO CONFERENCE. meeting Non-Coal Mining held from 14/11/2023 to 15/11/2023

MoM ID: EC/MOM/EAC/635696/10/2023

Agenda ID: EC/AGENDA/EAC/635696/10/2023

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

14/11/2023	10:30 AM	05:30 PM
15/11/2023	10:30 AM	05:30 PM

1. Opening remarks

The 22nd meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 14-15 November, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

2. Confirmation of the minutes of previous meeting

The minutes of the 21st EAC meeting held during 18-20 October, 2023 were placed before the members of the EAC.

3. Details of proposals considered by the committee

Day 1 -14/11/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Regularization of existing EC under the provision of EIA Notification 2006 and in compliance of MoEF&CC Notification S.O.1530(E) dated 6th April 2018 for Roha-Kotada-Nandra-Jarjok Bauxite Mining Project in the Mine Lease Area – 360.3601 Ha with the Production Capacity 1,00,000 TPA of M/s Gujarat Mineral Development Corporation Limited located at Village –Roha, Kotara, Nana Nandra, Mota Nandra and Jarjok, Tehsil–Abdasa & Nakhtarana, District - Kutch, Gujarat. by GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED located at KACHCHH, GUJARAT

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/GJ/MIN/432289/2023	IA-J-11015/33/2023-IA-II(NCM)	11/10/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

- The instant proposal is for Terms of Reference under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for mining of Limestone in Roha-Kotada-Nandra-Jarjok Bauxite Mining project of M/s Gujarat Mineral Development Corporation Limited with Production Capacity of 1,00,000 TPA in the mine lease area of 360.3601 ha, located at Village Roha, Kotada, Nana Nandra, Mota Nandra & Jarjok, Tehsil Abdasa & Naktarna, District Kutch, Gujarat.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The EAC noted that the Project Proponent vide email dated 30.10.2023 informed that the Terms of Reference (ToR) have been already granted on 18.04. 2022. Hence, the EAC **returned** the proposal.

3.1.5. Recommendation of EAC

Returned in present form

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Regularization of existing EC under the provision of EIA Notification 2006 and in compliance of MoEF&CC Notification S.O.1530(E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project in the Mine Lease Area – 280.7686 Ha with the Production Capacity 42000 TPA of M/s Gujarat Mineral Development Corporation Limited located at Village –Balachod, Mothala, Khandai, Tehsil Abdasa, District - Kutch, Gujarat by GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED located at KACHCHH, GUJARAT

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/GJ/MIN/432597/2023	IA-J-11015/34/2023-IA-II(NCM)	11/10/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

- The instant proposal is for Terms of Reference under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for mining of Limestone in Mothala Balachod Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Limited with Production Capacity of 42,000 TPA in the mine lease area of 280.7686 ha,

located at Village: Balachod, Mothala & Khandai, Tehsil Abdasa, District Kutch, Gujarat.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The EAC noted that the Project Proponent vide email dated 30.10.2023 informed that the Terms of Reference (ToR) have been already granted on 18.04.2022. Hence, the EAC **returned** the proposal.

3.2.5. Recommendation of EAC

Returned in present form

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

"Daba Saitthad Limestone Deposit" having mining lease area of 25 Ha by Star Cement Limited. by STAR CEMENT LIMITED located at EAST JAINTIA HILLS,MEGHALAYA			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/ML/MIN/449327/2023	IA-J-11015/39/2023-IA-II(NCM)	19/10/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

1. The instant proposal is for Terms of Reference for mining of Limestone in Daba Saitthad Limestone Deposit of M/s Star Cement Ltd with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha, located at Daba Saitthad (Wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site and hence the proposal falls under Category "A" and appraised at the Central level.

ii. The mine lease area is located between Latitude: 25°09'24.78"N to 25°09'39.43"N and Longitude: 92°21'29.53"E to 92°21'56.03"E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 (Restricted) and falls in Seismic Zone-V.

iii. Details of Mine Lease:

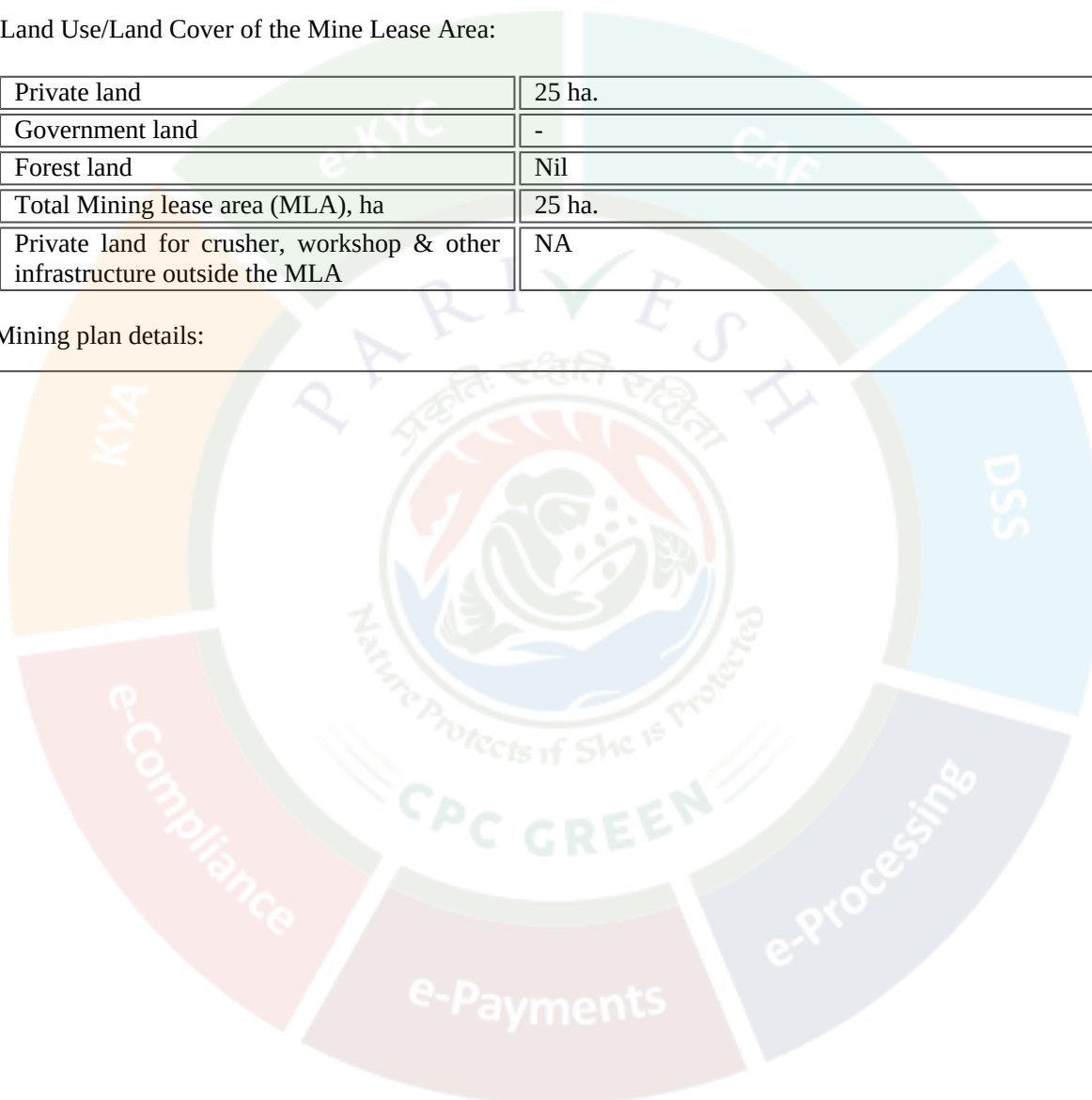
S.No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha

1	Prospecting License-MG.6/2023/33	01.03.2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.
2	Letter of Intent-MG.6/2023/277	28.08.2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	25 ha.
Government land	-
Forest land	Nil
Total Mining lease area (MLA), ha	25 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

v. Mining plan details:



Mining Plan was approved by Indian Bureau of Mines (IBM)

The Project Proponent has submitted that the Mining Plan was submitted to Indian Bureau of Mines (IBM) for approval vide application ID PB113 dated 06.10.2023.

Mining Parameters		Quantitative Description
Method of Mining		Opencast mechanized mining
Drilling/Blasting		Deep hole drilling & blasting.
Geological Reserves		52.44 million tons
Mineable Reserves		40.89 million tons
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)		2.832 MTPA (including 2.51 MTPA of limestone, 0.322 MTPA of Waste/OB including topsoil).
Life of mine		50 Years [Max production of Lst (ROM) shall be restricted to 2.51 MTPA. Production from this mine at a later stage of ML may get reduced. Additional exploration shall also be taken up which will increase the reserves.]
Mine Bench Height & Bench Width		The height of the bench will be 9 m and a minimum working width of the benches in mineral will be 18 m for safe operation of mining machinery.
No. of Mine Benches		13
Existing Depth, m bgl		NA, as it is a green field project
Ultimate Depth of Mining, m bgl		137
Ground Water Table, m bgl		156
Details of ground water intersection		Water table will not be intersected as it is at 156 m bgl and mining will be done up to 137 m bgl.
Individual bench slope		85° from horizontal
Overall pit slope		<45°
Details of existing/ proposed Crusher		Limestone will be transported to cement plant crusher of 1200 TPH capacity.
Mineral Beneficiation		NA
RoM output size		-1000 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance		The material after blasting will be loaded by hydraulic excavators of about 2.6 m ³ bucket capacity into tippers of 25 tons carrying capacity for its transportation to crusher at a distance of 4.6 km and temporary waste dump inside mining lease.
Generation of Topsoil/OB & its Management during plan period & conceptual period		Max. 322,524.25 TPA of Waste/OB including topsoil will be generated. Waste/OB will be dumped temporarily at earmarked places. Later it will be used as blending material after taking permission from the Government. The topsoil generated will be used extensively for plantation.
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period		There will be no reject from the mine.

vi. Water requirement:

Total water requirement	40.0 KLD	Fresh water	05 KLD
		Treated water	35 KLD

Source Water tankers from the company's cement plant.

Permission Vide Letter No. AGRO/IRRI-110/96/2004-05/80 dated Shillong, 15th Sep 2004

Additional information(if any) Total water requirement for the proposed mine will be around 40 KLD, out of which 35 KLD will be from STP treated water and 5 KLD of fresh water for domestic purposes.

vii. Nearest village / town/ highway/railway station / water bodies

Particulars	Particular's Name	Distance & Directions
Village	Lumshnong	1.95 Km NE
Town	Khliehriat	21.70 Km N
Highway	NH-6	0.57 km SE
Interstate Boundary	India-Bangladesh International Boundary	9.08 km SSW
	Meghalaya-Assam State Boundary	12.88 Km SE
Railway station	Hilara railway station	65 km (by road)
Water bodies	Um Badoh Stream	0.85 Km WNW
	Lubha River	3.71 km SE
	Seshympa River	4.87 Km WSW
Forest	Narpuh Reserve Forest	4.13 km SSW

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Area/Environmental Zone	Land/Protected Sensitivity	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest land within the minelease area and (if yes) status of Forest Clearance		No	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (HoFF), Meghalaya vide Lr.No: MFG.39/NLFC/Mining/MMMCR/ 2016/JH/15,529 Shillong dated 1 st Feb, 2023 stating that plot of land of 25 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012.
National Park		No	Not Applicable
Wildlife Sanctuary		Yes	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Biodiversity & Wildlife) & Chief Wildlife Warden vide Lr No. FWC/Clearance/12/4006, Shillong dated 1 st Feb, 2023 stating that the aerial distance of the proposed mining of Presbyterian Church located at Lumshnong Village, East Jaintia Hills District from the boundaries of Eco-Sensitive Zone is 2.7 km and Narpuh Wildlife Sanctuary is 3.9 km. This letter does not convey any NOC whatsoever.
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)		Yes	
Coastal Regulation Zone (CRZ)		No	Not Applicable
Schedule-I species (No.s and name of schedule-I species with authenticated letter)		Yes	There are ten Schedule I Species found in the buffer zone are given below: <i>Hoolock hoolock</i> (Western hoolock gibbon), <i>Nycticebus bengalensis</i> (Slow loris), <i>Prionailurus bengalensis</i> (Leopard Cat), <i>Python molurus</i> (Indian Rock Python), <i>Neofelis nebulosa</i> (Clouded Leopard), <i>Buceros bicornis</i> (Great Pied Hornbill), <i>Canis lupus pallipes</i> (Indian Wolf), <i>Manis pentadactyla</i> (Pangolin), and <i>Melursus ursinus</i> (Sloth bear), <i>Capricornis sumatraensis</i> (Himalayan serow).
Wildlife Conservation Plan		Yes	The Chief Wildlife warden had a meeting with Industries and Government Departments for preparation of Regional Conservation plan for the East Jaintia Hills district under the supervision and guidance of CWLW, Meghalaya and the cost for preparation and implementation of the Regional Conservation Plan may be shared by various project proponents on a proportionate basis keeping in view the likely impacts of each project on the wildlife and their habitat. We also confirmed that we shall be part of the regional conservation plan and will pay the fee as determined for our project.

ix. Green belt/plantation details:

Proposed area for green belt/plantation	At the end of life of mine, out of the total 25 ha area, 20.12 ha will be used for Bench Plantation/Grassification and 1.46 ha. along the 7.5 m wide peripheral boundary will be developed under green belt.
Budget for green plant & plantation till the end of life of mine.	Rs 1.03 Cr
Budget for nursery	NA
Details of existing plantation and its survival rate	NA as it is greenfield project
No. of tree cuts in the mine lease area and compensatory afforestation	215 trees will be cut in the mine lease. Total about 37854 trees will be planted upto conceptual period.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	1.46 Ha

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the R&R is not involved in this project.

xi. Court case details:

Court case no and its present status	The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit dated 17.10.2023 stating that they commit to comply with order of the Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 37.30 Crores
Employment	99 persons

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The entire mine lease area of 25 Ha is a Pvt. land. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site. The EAC asked about the status of the Mining Plan. The Project Proponent has informed the EAC that the Mining Plan was submitted to Indian Bureau of Mines (IBM) for approval on 06.10.2023. The scrutiny comments have been received from the IBM and Mining Plan is yet to be approved. NH-6 is located at a distance of about 1.0 km on Southern side and Lumshnong Village is located at a distance of about 3km on NE side. General drainage direction is towards west. Lubha River is located on the South Eastern side. The EAC asked about the distance of the International Boundary from the mine lease area. The Project proponent has informed the EAC that India – Bangladesh International

Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side.

The EAC asked about the mineral transportation route. The Project Proponent has informed the EAC that the mineral will be transported by road through NH6 to reach crusher. About 0.8km of company's own road and 0.6 km of public road will be used to reach NH6. Total distance to reach Crusher will be about 4.5 km. The EAC asked about the distance of the width of the public road. The Project Proponent has informed the EAC that the width of the public road is about 7-8m. The EAC asked the Project Proponent to physically verify the width of the public road. Further, the Project Proponent has informed the EAC that the crusher is located at the Cement Plant. The EAC also asked the Project Proponent whether there is any possibility of putting up crusher inside the mine lease area to avoid transportation by road from the view point of environment and safety. The Project Proponent has informed the EAC that the entire mine lease area is mineralized zone and crusher at cement plant is also utilized by other mines which leads to put up a another crusher at cement plant. The EAC suggested the Project Proponent to explore the possibility of utilizing mobile crusher at within the mine lease area. The EAC asked about the possibility of transporting the ore through Over Land Belt Conveyor (OLBC). The Project Proponent has informed the EAC that there are elevation issues to lay OLBC and will be explored in future. The EAC noted that a number of mines are going to come up in the study area, the EAC asked the Project Proponent to submit the future year wise production plan to assess the production requirement. The EAC also opined that the Project Proponent needs to explore the possibility of utilizing surface Ripper-Dozer combination along with the hardness of Limestone tested by reputed Institute.

The Project Proponent also informed the EAC that a letter has been obtained from the Office of the Principal Chief Conservator of Forests (HoFF), Meghalaya vide letter dated 1st Feb, 2023 stating that plot of land of 25 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012. The Project Proponent has informed the EAC that exploration level is G1. The EAC asked the Project Proponent to relook the life of the mine. The Project Proponent has informed the EAC that maximum elevation is 406 mRL and minimum is 336 mRL. The ultimate level of excavation will be 269 mRL. The depth of the mining will be 137 m bgl from the surface. The EAC opined that the Project Proponent needs to undertake a slope stability study and shall submit the same in the EIA/EMP report. Maximum production capacity of 2.51 MTPA of Limestone will be achieved in the 5th year of 1st five year plan period. At the conceptual stage, 23.54 ha will be under mining area and out of which 3.02 ha will be converted into water reservoir, 20.12 ha will be under bench plantation and 0.40 ha area under roads. The EAC opined that even though Project Proponent is a part of the Regional Conservation Plan, the Project Proponent needs to submit the Wildlife Conservation Plan for conservation of wildlife.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the India – Bangladesh International Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that *“all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence”*. The EAC was of the view that border area is falling within 20 km radius and hence the EAC opined that the NOC from the Ministry of Defence is prerequisite for grant of Terms of Reference (ToR). Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the NOC from the Ministry of Defence.
- ii. The Project Proponent needs to submit the width of the public road.
- iii. The Project Proponent needs to submit the hardness of Limestone tested by reputed Institute.
- iv. The Project Proponent needs to explore possibility of installing fixed/ mobile crusher within the lease area.

3.3.5. Recommendation of EAC

Deferred for ADS

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Proposed Limestone Mine “Mudhvay Sub Block A” (Area: 198.90.98 ha) with limestone production capacity of 2.5 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) at Village: Mudhvay, Taluka: Lakhpat, District: Kachchh, Gujarat by M/s. JK Lakshmi Cement. by JK LAKSHMI CEMENT LIMITED located at KACHCHH, GUJARAT

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity

			(Schedule Item)
IA/GJ/MIN/445723/2023	IA-J-11015/32/2023-IA-II(NCM)	12/10/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

1. The instant proposal is for grant of Terms of Reference (ToR) for mining of Limestone in “Mudhvay Sub Block A” of M/s. JK Lakshmi Cement Ltd. with Limestone production capacity of 2.50 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) in the mine lease area of 198.90.98 ha, located at Village: Mundhvay, Taluka: Lakhsat, District: Kachchh, Gujarat.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. General condition is applicable for the project due to presence of Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary located at a distance of 3.6 km and from the boundary of Narayan Sarovar Wildlife Sanctuary at an aerial distance of 4.0 km from lease boundary and hence the proposal falls under Category “A” and appraised at the Central level.

ii. The mine lease area is located between Latitude: 23°42'57.58" to 23°44'09.26" N and Longitude: 68°40'31.47" to 68°41'12.38" E. The mine lease area falls under the Survey of India Toposheet No: 41A/10 and falls in Seismic Zone-V.

iii. Details of Mine Lease:

S. No	Letter of Intent (LoI) and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease vide Lr.No.: MMR-102020-MM-496-CHH	06.08.2021	Limestone (Major mineral)	3 years	Govt. of Gujarat	198.90.98

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	58.63 ha
Government waste land	138.51 ha
Pond land	1.76 ha
Forest Land	-
Total Mining lease area (MLA), Ha	198.90.98 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Mining plan details:

Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	MCDR- MPCP 0 CaF1/50/2022- GNR-IBM_RO_GNR
	Date	16.01.2023
	Mineral & (Major/Minor)	Limestone (Major mineral)
	Mine Lease Area, Ha	198.90.98 ha
	Validity	5 years from the date of Mining Lease registration
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Excavation will be done by mechanized opencast method using Surface Miner with combination of excavator-tippers combination. Surface Miner is eco-friendly machine as it suppresses dust emission. No	

	drilling and blasting carried out during excavation of limestone
Geological Reserves	263.75 Million TPA (As on 01/10/2022)
Mineable Reserves	227.14 Million TPA (As on 01/10/2022)
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 4.8 Million TPA <u>Breakup of Total Excavation:</u> 1. Limestone: 2.5 Million TPA 2. Top Soil: 0.22 Million TPA 3. Over Burden: 2.08 Million TPA
Life of mine	95 years (Expected by 01.10.2022)
Mine Bench Height & Bench Width	Bench height: 6.0 m (Minimum) Bench Width: 20 m (Maximum)
No. of Mine Benches	16 benches at conceptual stage
Existing Depth, m bgl	It's a greenfield project and so not applicable.
Ultimate Depth of Mining, m bgl	-89 m RL (112 m bgl)
Ground Water Table, m bgl	6 m bgl
Details of ground water intersection	Water table will be intersected during the plan period and necessary permission will be taken before intersecting ground water table.
Individual bench slope	70°
Overall pit slope	45°
Details of existing/ proposed Crusher	Nil
Mineral Beneficiation	Nil
RoM output size	Nil
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by dumpers via haul road and it will be transported to end users via Road.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> • Total 0.22 million tonnes of top soil will be generated during plan period which will be used in green belt generation. At the conceptual stage top soil generated will be used for Greenbelt and plantation. <u>Over Burden:</u> • During this Plan period, 6.46 Million Tonnes Over burden will be generated which will be dumped over an area of 24.51 ha. • Approx 103.73 million tonnes of overburden will be generated during conceptual stage. Management: At the conceptual stage, OB generated will be used for backfilling of 70.87 ha excavated area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	305 KLD	Fresh Water	305 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump as and when developed Permission will be taken from State Govt. for using Ground water.		
Permission for withdrawal/ intersection along with details	Working depth during the plan period will be -19 m RL (42 m bgl) and at conceptual stage, ultimate working depth will be - 89 m RL (112 m bgl). Depth		

of grant and its validity

of water table in the area is 6 m bgl. Water table will be intersected during the plan period and necessary permission will be taken before intersecting ground water table.

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Nathura Dada	~250 m in West direction
Nearest Town	Bhuj	~111 km in SE direction
Nearest State/National Highway	SH-6	~1.5 km in WNW direction
Interstate Boundary	None	None
Railway Station/Railway line	Bhuj Railway Station	~113 km in SE direction
Water Bodies	Nathuwara Talav	Within the ML area
	Kapurarsi Nadi	~ 3.5 km in West direction
	Sangdiawala Talav	~ 4.5 km in south direction
	Korai Creek	~ 4.5 km in West direction
Forest	Mudhvay Reserved Forest	~ 0.75 km in SE direction
	Naredi Reserve Forest	~ 3.5 km in South direction
	Kaiyari Reserved Forest	~ 3.0 km in SW & ~ 5.5 km in SW direction
	Godhatad Reserved Forest	~6.5 km in SW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	The Project Proponent has submitted the letter obtained from the Forest and Environment Department, Government of Gujarat, Gandhinagar letter dated 23.06.2023 stating that proposed area is located North Side 4 km away from Narayan Sarovar Wildlife sanctuary and 3.6 km away from Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary.
Wildlife Sanctuary	Yes	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	Yes	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study will be carried out, if schedule - I found in the study area Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for greenbelt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be 80.28 ha (4.60 ha area on 7.5 m lease periphery, 4.81 ha. on safety zone of Road and water pond & 70.87 ha. backfilled area).
Budget for green plant & plantation till the end of life of mine.	Rs 3.61 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	55

Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	4.60 ha
50 m safety zone of nallah, roads, electric lines	4.81 ha
500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement:

R & R details	1. Total mining lease area is 198.90.98 ha, out of which 58.63 ha is private land. 2. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 25.09.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BP 852442 dated 31.10.2023 stating that the company undertakes by affidavit that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 200 Crores
Employment	92 persons

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The Project Proponent has shown the mine lease boundary over an area of 198.90.98 ha. The instant project attracts the general condition due to presence of Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary located at a distance of 3.6 km and from the boundary of Narayan Sarovar Wildlife Sanctuary at an aerial distance of 4.0 km from lease boundary. The Project Proponent has also shown the boundary of ESZ and Narayan Sarovar Wildlife Sanctuary from the mine lease area on the southern side. Further, the Project Proponent presented the letter obtained from the Forest and Environment Department, Government of Gujarat, Gandhinagar dated 23.06.2023 regarding the distance of ESZ and Narayan Sarovar Wildlife Sanctuary from the mine lease area. The India-Pakistan International boundary is located at a distance of 27 km on northern side from the mine lease area. The Arabian Sea is located at a distance of about 30 km on western side from the mine lease area. The Korai Creek is located at a distance of about 5.0 km, NW from the mine lease area. The instant proposal does not come under CRZ. The total mine lease area is 198.90.98 ha, out of which 138.51 ha is a Govt. land, 58.63 ha is a Pvt. land (Rain fed Agriculture land) and 1.76 ha is a Pond land. A cart track is passing through the

mine lease area and will not be disturbed during entire life of the mine. A 50m safety zone on either side will be maintained along the cart track. There are also 2 ponds located within the mine lease area and the same will be maintained as non-mining zone during entire life of the mine. Dense plantation and bund formation will be undertaken to protect the pond. The EAC opined that the adequate safety measures have to be taken to protect the pond. Private Agricultural land will be purchased. There will be about 10-15 Project Affected Families. Detailed R&R survey is under process.

The EAC asked about the mineral transportation route. The Project Proponent has informed the EAC that the mined out mineral will be transported by road through NH on western side to the other cement plants and industries. The EAC asked about the proposed depth of mining and no. of mine benches. The Project Proponent has informed the EAC that the proposed depth of mining will be 112m bgl and 16 no. of mine benches will be created. The EAC opined that the pit slope stability study has to be carried out. The Project Proponent has informed the EAC pit slope stability study will be undertaken within 1st year plan period. The EAC also asked about the presence of Schedule - I species in the study area. The Project Proponent has informed the EAC that generally Chinkara, Monitor lizard, Great Indian Bustard, Leopard are found in the study area. A detailed survey will be undertaken and will be submitted in EIA/EMP report. The EAC asked about the Overburden dumping. The Project Proponent has informed the EAC that the OB will be dumped in the center part of the mine lease area. No backfilling has been proposed in the 1st five year plan period. The thickness of the Overburden is 5-6m. Height of the dump will be 30m. Topsoil will be maintained as a separate dump. Excavation will be done by mechanized opencast method using Surface Miner with combination of excavator-tippers combination. Water requirement will be 305.0 KLD. The EAC asked the Project Proponent to explore the possibility to reduce the water consumption. At conceptual stage, total area under mining will be 177.60 ha, out of which 70.87 ha will be backfilled and an area of 106.73 ha will be converted into water reservoir. The EAC asked the Project Proponent to revisit the proposed species for plantation. The EAC also suggested the Project Proponent to address the additional traffic load due to transportation and also to carry out cumulative impact assessment.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s. JK Lakshmi Cement Ltd. for "Mudhvay Sub Block A" with Limestone production capacity of 2.50 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) in the mine lease area of 198.90.98 ha, located at Village: Mundhvay, Taluka: Lakhpat, District: Kachchh, Gujarat for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Terms of Reference

3.4.6.1. Specific

Cost Benefit Analysis

1. The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.

Ecology

1. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.

Greenbelt and Plantation

1. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.

Groundwater

1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Mining Activity	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
Risk & Disaster	
1.	Since the project is located in Seismic Zone –V, the Project Proponent needs to submit the risk and disaster management plan. The Project Proponent also needs to submit the past history of disasters occurred in the region.
Road Transportation	
1.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.
R&R Plan	
1.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
Slope Stability	
1.	The Project Proponent needs to undertake the scientific study on pit slope stability by the reputed Institute.
Soil Salinity	
1.	The Project Proponent needs to submit the existing soil salinity data of the Mine lease area and in the Korai Creek.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC
Water bodies	
1.	The Project Proponent needs to submit the safety measures proposed to protect the ponds within the mine lease area.
Environment Monitoring & EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest

	village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
2.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Greenbelt and Plantation	
1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored. The Project Proponent to revisit the proposed species for plantation.
Groundwater	
1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Environment Monitoring & EMP	
1.	The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity of the proposed mine, existing mines, cement plant and other operating mines including the transport scenario in the study area and also should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters and data used for each activity of the modeling also needs to be submitted at the time of appraisal of EC.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
Water bodies	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

3.4.6.2. Standard

1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines

	copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly

	indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
Wildlife	
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.

3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
Baseline Environment	
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
Water Environment	
1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
Hydro Geology	
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
Transportation	
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the

	infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
Land Acquisition and R&R	
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
Socio-Economic Environment	
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
Environmental Monitoring and Management	
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
Critically Polluted Areas, Aravali & CRZ	
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.

2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
Risk Assessment & Disaster Management	
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.
Miscellaneous	
1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Rohisa Limestone Mine (ML Area: 891.7185 ha) with Limestone Production Capacity 3.00 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat by HEIDELBERGCEMENT INDIA LIMITED located at AMRELI, GUJARAT			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/GJ/MIN/434388/2023	IA-J-11015/19/2023-IA-II(NCM)	06/07/2023	Mining of minerals (1(a))

3.5.2. Project Salient Features

The instant proposal is for mining of Limestone in Rohisa Limestone Mine of M/s HeidelbergCement India Limited with Limestone Production Capacity 3.0 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) in the mine lease area of 891.7185 ha, located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.

ii. The mine lease area is located between Latitude: 20°49’00” N to 20°51’00” N and Longitude: 71°13’00” E to 71°18’45” E. The mine lease area falls under the Survey of India Toposheet No: 41 P/5 (Restricted) and falls in Seismic Zone-III.

iii. The instant proposal was earlier considered in the 34thEAC meeting held during 27 – 30 July 2021 wherein the Committee was of the view that clarification is required regarding the distance from CRZ through Coastal Zone Management Plan (CZMP) authenticated by the Competent Authority in the State and therefore the Committee returned the proposal in present form as part of mine lease falls under CRZ. Then, the Project Proponent has submitted a fresh proposal for Terms of Reference along with the information sought by the EAC and accordingly the proposal was considered in the 18thEAC (Non-Coal Mining) meeting held during 31st July & 1st August, 2023. After detailed deliberations, the EAC deferred the proposal. The CRZ Division gave their comments on 03.09.2023 and the Project Proponent submitted the information on 19.10.2023 in Parivesh portal and accordingly the proposal was again reconsidered in the EAC meeting held during 14-15 November, 2023.

Based on observation of EAC in its EAC meeting held during 31st July & 1st August, 2023 and compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held on 31 st July & 1 st August, 2023	Reply by Project Proponent
1	The Ministry may seek comments from the CRZ Division in the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21.10.2022 regarding opinion for CRZ-NOC for Rohisa Limestone Mine of M/s HeidelbergCement India Limited.	The CRZ Division gave their comments on 01.09.2023 as given below: 1. As per para 3(x) of CRZ Notification 2011 Mining of sand, rocks and other sub-strata materials except, mining of Atomic Minerals notified under Part-B of the First Schedule of the Mining and Minerals (Development) Act, 1957 (67 of 1957) occurring as such or in association with one or other minerals and exploration and exploitation of Oil and Natural Gas, is prohibited in CRZ area. 2. As the record available in the file and EAC (NCM) noted Project Proponent has carried out the CRZ study conducted by the Institute of Remote Sensing, Anna University, Chennai and project activity falls in CRZ area and as per CRZ Notification it is prohibited activity. 3. The EAC opined that the Ministry may seek comments from the CRZ Division of the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21/10/2022 regarding the opinion for CRZ-NOC for Rohisa Limestone Mine of M/s Heidelberg Cement India Limited. 4. It is submitted that as already mentioned above the activity is prohibited as per CRZ Notification, however, it is requested the

		Division concern may be provided a statutory document as per CRZ Notification para 4.2 i.e. 1:4000 scale map, SCZMA recommendation etc. for a complete examination of the project.
2	The Project Proponent needs to ensure that the depth of mining may be planned in such a way that the floor RL at any place should not be lower than the mean sea level in the modified mining plan submitted for approval.	The Project Proponent has submitted that as per Modified Mining Plan, there is no proposal for mining in CRZ area including its appropriate buffer. Also, aiming the prevention of sea water ingress, the ultimate pit depth in the non-CRZ area has been kept up to 0m AMSL only. The mineable reserves have also been estimated up to 0m AMSL only. It shall be ensured during course of mining that the excavation shall not be below 0m AMSL. The Project Proponent also submitted the relevant page of modified mining plan showing the above statement and conceptual cross sections.
3	The Project Proponent needs to submit the modified mining plan approved by Indian Bureau of Mines (IBM).	The Project Proponent has submitted that the Modified Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM), Gandhinagar vide Letter No. MCDR-MPCPOCaFI/10/2023-GNR-IBM_RO_GNR MP-472 Mine Code: 38GUJ439001 dated 21.09.2023. It is also mentioned that no mining activity shall be carried out in CRZ zone and related zones as notified time to time, even in case of proposal made therein.
4	The Project Proponent needs to submit the copies of the letter wherein State DMG has mentioned that the CRZ area shall be kept as a non mining zone instead of surrendering it.	The Project Proponent has submitted that CRZ study has been conducted by the Institute of Remote Sensing, Anna University, Chennai. As per approved CZMP Map of Gujarat and Local Level Coastal Regulation Zone Map prepared by Institute of Remote Sensing, (IRS), Chennai GCZMA has confirmed that out of the total mine lease area i.e. 891.7185 ha, an area of 183.6332 ha falls under CRZ. S. No CRZ Classification Area (in Ha) A CRZ - 1B 139.9037 B CRZ - III (NDZ) 30.9217 C CRZ - III (200 m to 500 m from HTL)

		12.8078 I Total Area falling in CRZ 183.6332 II Outside CRZ 708.0853 Total 891.7185 <i>Source: CRZ Study Report prepared by IRS, Anna University, Chennai</i> The Project Proponent also submitted that a request letter for dividing mining lease was submitted to the Commissioner-Geology & Mining, Govt. of Gujarat, vide letter no. HCIL/GM-AM/GML/2022/38, dated 11.07.2022. A letter dated 10.04.2023 was issued by the Commissioner of Geology & Mining, Gandhinagar stating that the Company shall not carry out any activities otherwise permissible as per CRZ Notification within area falling in CRZ without prior permission from the Competent Authority. Again, a letter was submitted on 14.08.2023 to Commissioner of Geology & Mining, Gandhinagar for amending the above said letter dated 10.04.2023 as desired by the EAC in its meeting held on 31.07.2023. Commissioner of Geology & Mining, Gandhinagar vide Letter no. CGM/Lease/ML/Heidelberg/2022-23/3774, dated 05.10.2023 had issued a letter stating that the Company shall not carry out any mining activities in the area falling in CRZ without prior permission of competent authority and such area shall be kept as a non-mining zone instead of surrendering it.
5	The Project Proponent needs to submit the existing soil salinity data of the Mine lease area i.e adjacent to CRZ, within CRZ and farthest from CRZ boundary.	The Project Proponent has submitted that Central Soil Salinity Research Institute (CSSRI) is in process to carry out the study regarding the soil salinity of the Mine lease area (i.e. adjacent to CRZ, within CRZ and farthest from CRZ boundary). The Project Proponent also submitted the correspondence made by CSSRI vide email dated 18.10.2023 regarding the methodology and work schedule of the study.

iv. Details of Mine Lease:

a) Initially, the prospecting license was granted by the State Govt. on 31.05.2000 over an area of 891.7185 Ha in Villages Rohisa, Balana and Vadhera of Taluka - Jafraabad of Dist. Amreli (Gujarat) in favour of M/s Indorama Cement

Ltd.

b) Then, the Govt. of Gujarat vide its letter No. MCR-112005-987-CH-1 dated 08.02.2006 granted the Letter of Intent for grant of Mining lease for minerals Limestone and Marl over an area of 891.7185 Ha in favour of M/s Indorama Cement Ltd.

c) Pursuant to a Scheme of Amalgamation sanctioned by the Hon'ble High Courts of Bombay and Karnataka, Indorama Cement Limited was amalgamated with Mysore Cements Limited and the new entity was renamed as HeidelbergCement India Limited w.e.f. 16.04.2009. The same was intimated to the office of Deputy Secretary, Industry and Mines Department, Govt. of Gujarat requesting to take note and confirm the aforesaid change of name of the company so that permits and licenses required to set up an integrated Cement Plant can be obtained and also for incorporation of change of name of company in relevant records and documents. The process took its own time and ultimately the Govt. of Gujarat issued the order no. MCR-112005-ML 987-CHH-1 dated 10.01.2017 for grant of mining lease over an area of 891.7185 Ha in favor of M/s HeidelbergCement India Limited.

d) The mine lease deed was executed on 09.09.2020 and registered on 15.09.2020 for the mineral Limestone and Marloveran area of 891.7185 Ha for a period of 50 years i.e., upto 14.09.2070 in favor of M/s HeidelbergCement India Limited.

v. Land Use/Land Cover of the Mine Lease Area:

Private Agriculture land	526.1699 ha
Government land	292.6380 ha
Gauchar land	72.9106 ha
Forest land	-
Total Mining lease area (MLA), ha	891.7185 ha
Private land for crusher, workshop & other infrastructure outside the MLA	Crusher to be Installed in premises of Proposed Interlinked Cement Plant
Additional information (if any)	Total ML Area is 891.7185 out of which 183.6332 ha falls in CRZ & 72.9106 ha is Gauchar land.

vi. Details of Mining Plan: -

Modified Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	684 (4) (1)/MP-358/2021-22 GNR
	Date	01.09.2021
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	891.7185
	Validity	2021-22 to 2024-25
Additional information (if any)	Mining Plan with Progressive Mine Closure Plan was approved by IBM vide COM (NZ) letter no.682(23)(452)/2006-Udai, dated 23.01.2006 in the name of Indorama Cement Ltd. Modified mining plan in the name of HeidelbergCementIndia Limited (HCIL) has been approved by IBM vide letter dated 684(4)(1)/MP-358/2021-22GNR dated 01.09.2021. Now, HCIL has submitted the modification in the mining plan for further approval to IBM.	
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mechanized method	
Drilling/Blasting	No drilling & blasting is involved. The mineral will be mined by deploying surface miners, dumpers, bulldozer, and excavators/loaders.	
Geological Reserves	230.438 Million Tonnes	
Mineable Reserves	100.679 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Limestone: 3.0 Million TPA Top Soil: 0.147 Million TPA Total Excavation: 3.147 Million TPA	
Life of mine	~34 years (Based on the future exploration life of mine may change)	
Mine Bench Height & Bench Width	Bench Height: 6 m	

	Bench Width: 12 m	
No. of Mine Benches	5	
Existing Depth, m bgl	This is proposed mine	
Ultimate Depth of Mining, m bgl	26 m BGL	
Ground Water Table, m bgl	26 m BGL	
Details of ground water intersection	This proposal is for Terms of Reference (ToR). Details will be incorporated in EIA/EMP Report	
Individual bench slope	75°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	Crusher to be installed in premises of proposed Interlinked Cement Plant	
Mineral Beneficiation	Mineral Beneficiation is not involved.	
RoM output size	-80 mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The mined materials will be dozed and fed to a hopper located at mines using dumpers from where the material will be conveyed to the Cement Plant via covered conveyor belt.	
Generation of Topsoil/OB & its Management during plan period & conceptual period	During Plan Period About 0.147 Million Tonnes of top soil will be generated which will be simultaneously used for the greenbelt/plantation purpose. At Conceptual Stage About 5.5 Million Tonnes of top soil to be generated which will be used in Greenbelt/plantation.	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	None	

vii. Water requirement:

Total water requirement	150 KLD	Fresh water	142 KLD	
		Treated water	8 KLD	
Source	Desalination Plant (will be installed with Cement Plant) & from mine sump			
Permission for withdrawal/ intersection along with details of grant and its validity	This proposal is for Terms of Reference (ToR). Details will be incorporated in EIA/EMP Report.			

viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions	
Village	Balana	Adjacent in ENE direction	
	Vadhera	~200 m in ENE direction	
	Rohisa	Surrounded by ML	
	Dharabander	~0.7 km in WNW direction	
	Khatrivada	~1.0 km in ENE direction	
Town	Jafrabad	~5.0 km in ENE direction	
Highway	SH 34	~0.3 km in ENE direction	
	SH 90	~0.3 km in ENE direction	
	NH 51	~5.0 km in NW direction	
	SH 104	~3.5 km in SW direction	
Interstate Boundary	None	-	
Railway Station/Railway line	Una Railway Station	~20 km in West direction	
Water Bodies	Arabian Sea	In South direction	

	Bhatia Nadi	Adjacent in WNW direction
	RawalNadi	~1.0 km in WSW direction
	RupanNadi	~1.5 km in WNW direction
	Malan Nadi	~3.0 km in WNW direction
	Jafrabad Creek	~6.0 km in ENE direction
	RaidiNadi	~7.5 km in ENE direction
Forest	RF	Adjacent in SW direction
	RF	~8.5 km in SW direction
	RF	~8.5 km in ENE direction

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent has obtained the letter from the Office of the Principal Chief Conservator of Forests, Gandhinagar vide dated 04.04.2022 stating that no forest land is involved in the project.

National Park	No	Project Proponent reported that no National Park, Wild Life Sanctuaries, Biosphere Reserves, Tiger Reserves, Wildlife Corridors, etc. falls within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ)/Eco-Sensitive Area (ESA)	No	The Project Proponent has obtained the letter from the Office of the Principal Chief Conservator of Forests, Gandhinagar vide dated 04.04.2022 certifying that the distance between mining lease for mineral limestone of M/s Heidelberg Cement India Limited situated in Village: Rohisha, Balana and Vadhera, Area: 891.7185 ha. Dist: Amreli is 21.85 km away from the Gir Sanctuary. PP also submitted the map showing the distance of the forest area and Gir Wildlife Sanctuary from the mine lease area and which was authenticated by the Chief Wildlife Warden, Gandhinagar.

Coastal Regulation Zone (CRZ) - Yes

The Project Proponent has submitted that the CRZ study has been conducted by the Institute of Remote Sensing, Anna University, Chennai. As per approved CZMP Map of Gujarat and Local Level Coastal Regulation Zone Map prepared by Institute of Remote Sensing, (IRS), Chennai GCZMA has confirmed that out of the total mine lease area i.e. 891.7185 ha, an area of 183.6332 ha falls under CRZ.

S. No.	CRZ Classification	Area (In Ha)
A	CRZ - 1B	139.9037
B	CRZ – III (NDZ)	30.9217
C	CRZ – III (200 m to 500 m from HTL)	12.8078
I	Total Area falling in CRZ	183.6332
II	Outside CRZ	708.0853
	Total	891.7185
	Source: CRZ Study Report prepared by IRS, Anna University, Chennai	

The Project Proponent also submitted that the Commissioner of Geology & Mining, Gandhinagar vide letter no. CGM/Lease/ML/Heidelberg/2022–23/848 dated 10.04.2023 has mentioned that an area of 183.6332 ha falls within the mine lease area under various categories of Coastal Regulation Zone. So, as mentioned in letter dated 21.10.2022, Director (Environment) & MS, GCZMA, GOI, the company shall not carry out any activities otherwise permissible as per CRZ notification within area falls in CRZ without prior permission of Competent Authority.

x. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total Greenbelt/Plantation: 136.31 ha Greenbelt (7.5 m): 22.10 ha Plantation: 114.21 ha (3.56 ha on Bench Plantation & remaining 110.65 ha on unworked area, Road side, safety zone). No. of Saplings Proposed: 3,40,775
Budget for green plant & plantation till the end of life of mine.	Rs. 6.81 Crore
Budget for nursery	Rs. 10 Lakh
Details of existing plantation and its survival rate	Survival Rate will be maintained 95%
No. of tree cuts in the mine lease area and compensatory afforestation	250 trees will be cleared
Particulars for Green belt/plantation	Area covered (In Ha)
7.5 m barrier & non-mineralized zone	22.10ha
50 m safety zone of nallah, roads, electric lines	2.74 ha area to be covered along the roads out of 110.65 ha total plantation

xi. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the land will be purchased directly from the land owners on willing buyer willing seller basis. Adequate compensation based on mutual negotiations will be paid for the land, standing crop and any other infrastructure affected by the procurement of land. No. of Villages: 3 No. of Project Affected Families: 350 No. of Project Displaced Families: 104 Detailed R & R study is yet to be carried out.

xii. Court case details:

Court Case, No and its present status	The Project Proponent has reported that there is no court case pending against the project.
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted an undertaking vide letter dated 23.06.2023 stating that there is no litigation pending against the project and/or any direction/order passed by any Court of Law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibility will be borne by the Company.

xiii. Affidavit/Undertaking details:

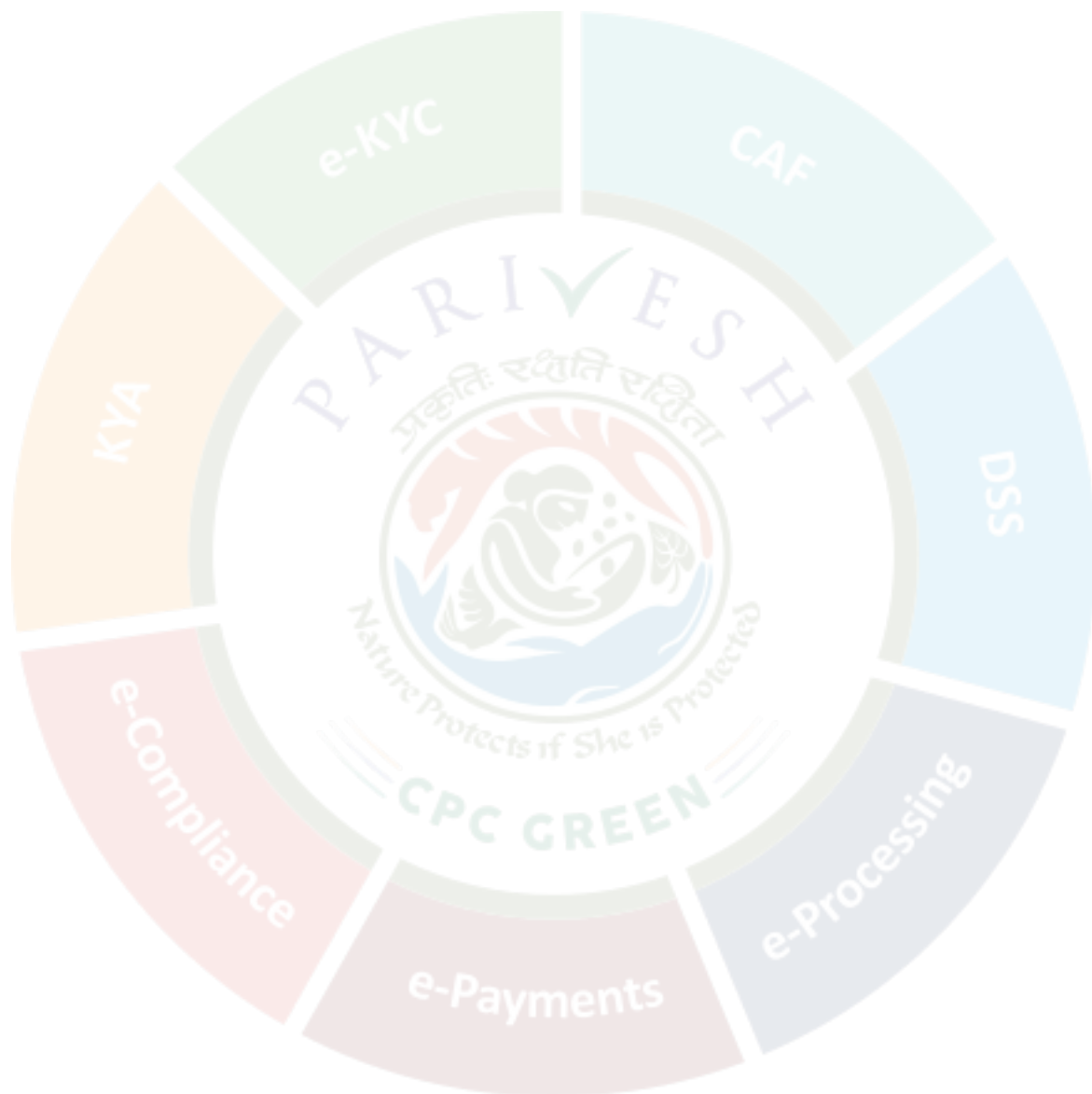
Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted an affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 485498 dated 24.06.2023 stating that the company hereby undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Rs. 70 Crores
Employment (Nos)	91 Persons

3.5.3. Deliberations by the committee in previous meetings

Date of EAC 1 :31/07/2023



Deliberations of EAC 1 :

The Project Proponent/Consultant has informed the EAC that the instant proposal was earlier considered in the 34th EAC meeting held during 27th to 30th July 2021, wherein the Committee was of the view that clarification is required regarding the distance from CRZ through Coastal Zone Management Plan (CZMP) authenticated by the Competent Authority in the State and therefore the Committee returned the proposal in present form as part of mine lease falls under CRZ. In this regard, Project Proponent has carried out the CRZ study conducted by Institute of Remote Sensing, Anna University, Chennai and accordingly fresh proposal for Terms of Reference (ToR) has been submitted.

The Project Proponent/Consultant has presented the KML file to indicate the site features in the study area. The Project Proponent has shown the boundary of the mine lease area and an area of 183.6332 ha falls within CRZ. Project Proponent also informed that no mining activity will be carried out over an area of 183.6332 ha falling within CRZ. Further, the Project Proponent also informed the EAC that an area of 72.9106 ha of Grazing land will be under no mining zone. There are three villages located nearby to the mine lease area namely Balana (Adjacent, ENE), Vadhera (~200 m, ENE) and Rohisa surrounded by mine lease area. Nearest school is located at a distance of 0.02 km in Balana Village. The EAC asked about the route for transportation of mineral. The Project Proponent has informed the EAC that the mined materials will be dozed and fed to a hopper located at mines using dumpers from where the material will be conveyed to the cement plant on the northern side of the mine lease area with the help of belt conveyors.

The Project Proponent has also informed the EAC that the letter has been obtained from the Office of the Principal Chief Conservator of Forests, Gandhinagar vide dated 04.04.2022 certifying that the distance between mining lease for mineral limestone of M/s Heidelberg Cement India Limited situated in Village: Rohisha, Balana and Vadhera, Area: 891.7185 ha is 21.85 km away from the Gir Sanctuary. Project Proponent has also shown the map authenticated by the Chief Wildlife Warden, Gandhinagar showing the distance of the Gir Wildlife Sanctuary from the mine lease area. The EAC asked about the approval of Mining Plan. The Project Proponent has informed the EAC that the modified mining plan was approved by Indian Bureau of Mines (IBM) vide letter dated 01.09.2021. An area of 183.6332 ha was excluded and accordingly modification in mining plan was submitted to IBM for approval. The EAC was of the view that no mining activity is allowed in CRZ and what is the need to have the area of 183.6332 ha and why not be surrendered. The Project Proponent has informed the EAC that after obtaining the letter from State Coastal Management authority, a request letter has been submitted to the State Mining Dept. to separate the area of 183.6332 ha; wherein the Dept. has informed that an area of 183.6332 ha shall be maintained as no mining zone. The area was retained in the mine lease so as in future, CRZ clearance may be obtained. The EAC asked the Project Proponent whether any movement of Lions and turtle breeding observed in the study area or not? The Project Proponent has informed the EAC that the same will be submitted along with the Final EIA/EMP report.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that an area of 183.6332 ha falls within CRZ and after obtaining the letter from State Coastal Management authority, the Project Proponent has submitted the modified mining plan for approval to the Indian Bureau of Mines (IBM). The EAC felt that it is necessary to review the approved modified mining plan. The EAC asked the Project Proponent to ensure that the depth of mining may be planned in such a way that the floor RL at any place should not be lower than the mean sea level in the modified mining plan submitted for approval. Thus the EAC was of the view that the instant proposal to be considered only after the submission of the approved modified mining plan by IBM. The EAC also opined that the Ministry may seek comments from the CRZ Division in the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21.10.2022 regarding opinion for CRZ-NOC for Rohisa Limestone Mine of M/s Heidelberg Cement India Limited. Therefore, the EAC **deferred** the proposal for want of following additional information: -

- i. The Ministry may seek comments from the CRZ Division in the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21.10.2022 regarding opinion for CRZ-NOC for Rohisa Limestone Mine of M/s Heidelberg Cement India Limited.
- ii. The Project Proponent needs to ensure that the depth of mining may be planned in such a way that the floor RL at any place should not be lower than the mean sea level in the modified mining plan submitted for approval.
- iii. The Project Proponent needs to submit the modified mining plan approved by Indian Bureau of Mines (IBM).
- iv. The Project Proponent needs to submit the copies of the letter wherein State DMG has mentioned that the CRZ area shall be kept as a non mining zone instead of surrendering it.
- v. The Project Proponent needs to submit the existing soil salinity data of the Mine lease area i.e adjacent to CRZ, within CRZ and farthest from CRZ boundary.

3.5.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML to show the site features in the study area. The EAC deliberated

on the additional details submitted by the Project Proponent and the Consultant. The EAC noted the comments given by the CRZ Division on 01.09.2023. The Project Proponent has shown the area of 183.6332 ha falls under CRZ and informed the EAC that no mining will be undertaken in CRZ area. The EAC asked the Project Proponent about the distance of the International Boundary and seaboard frontier. The Project Proponent has informed the EAC that the India-Pakistan International Boundary is located at a distance of about 370 km, N and the mine lease area is 12 nautical miles away from the seaboard frontier. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that “all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence”.

The Project Proponent also informed the EAC that there is no proposal for mining in CRZ area including its buffer. The mineable reserves have also been estimated up to 0m AMSL only and it will be ensured that during course of mining that the excavation will not be below 0m AMSL. The above statement is also included in the modified mining plan. Further, the Project Proponent has informed the EAC that the Modified Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM), Gandhinagar vide letter dated 21.09.2023. The Project Proponent also informed the EAC that Commissioner of Geology & Mining, Gandhinagar vide letter dated 05.10.2023 had issued a letter stating that the Company shall not carry out any mining activities in the area falling in CRZ without prior permission of competent authority and such area shall be kept as a non-mining zone instead of surrendering it. The Central Soil Salinity Research Institute (CSSRI) is in process to carry out the study regarding the soil salinity of the Mine lease area (i.e. adjacent to CRZ, within CRZ and farthest from CRZ boundary) and the same will be submitted in the EIA/EMP report. The EAC asked the Project Proponent about the land acquisition plan. The Project Proponent has informed the EAC that the land will be purchased directly from the land owners on willing buyer willing seller basis. Initially, mining will be carried out in the Govt. land and then the Private land will be purchased. The EAC asked about the location of the crusher. The Project Proponent has informed the EAC that crusher is proposed to be installed in the Cement Plant.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) subject to submission of No Objection Certificate (NOC) from Ministry of Defence for Rohisa Limestone Mine of M/s HeidelbergCement India Limited with Limestone Production Capacity 3.0 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) in the mine lease area of 891.7185 ha, located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Terms of Reference

3.5.6.1. Specific

Cost Benefit Analysis

1.	The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.

Greenbelt and Plantation

1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.

Groundwater

1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines

	issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Soil Salinity Data	
1.	The Project Proponent needs to submit the existing soil salinity data of the Mine lease area i.e adjacent to CRZ, within CRZ and farthest from CRZ boundary.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC
Grazing land	
1.	The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.
CRZ Map	
1.	The project proponent needs to submit 1:4000 scale map of the mine lease location and its 10 km radius.
Groundwater	
1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Protection of School and Habitation	
1.	The Project Proponent needs to submit the distance of the Ultimate Pit Limit from the School and Habitations along with their mitigation measures to protect it from the mining activity. The Project Proponent also needs to submit the details of strength of school.
Environment Monitoring and EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration due to movement of HEMM.
Environment Monitoring and EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
Water quality	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate

	scaling.
Greenbelt and Plantation	
1.	The Project Proponent needs to increase the no. of saplings proposed. The Project Proponent also needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

3.5.6.2. Standard

1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water

	bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
Wildlife	
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
Baseline Environment	
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
Water Environment	

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

Hydro Geology

1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

Transportation

1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Land Acquisition and R&R

1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

Socio-Economic Environment

1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

Environmental Monitoring and Management

1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

Critically Polluted Areas, Aravali & CRZ

1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

Risk Assessment & Disaster Management

1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Miscellaneous

1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the

Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Day 2 -15/11/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Gothra Parasrampura West Block for Limestone by ACC LIMITED located at JHUNJHUNU, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/449491/2023	IA-J-11015/36/2023-IA-II(NCM)	22/10/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for mining of Limestone in Gothra Parasrampura West Limestone Mine Block' of M/s ACC Ltd with production capacity of 1.0 MTPA of Limestone & 1.57 MTPA of Overburden including Topsoil (Total excavation: 2.57 MTPA) in the mine lease area of 287.7539 ha, located at Gothra Village, Navalgarh Taluk, Jhunjunu District, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.

ii. The mine lease area is located between Latitude: 27°46'10.8821"N to 27°47'17.9410"N and Longitude: 75°19'44.8420"E to 75°21'10.1965"E. The mine lease area falls under the Survey of India Toposheet No: 45M/5.

iii. Details of Mine Lease:

S. No.	Prospecting License/Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent for grant of mining lease vide Lr.No: P.2(28)Khan/Group-2/2022,	18.11.2022	Limestone	2 years	Govt. of Rajasthan	287.7539 Ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	267.036Ha

Government land	20.7179Ha
Forest land	Nil
Total Mining lease area (MLA)	287.7539 Ha.
Private land for crusher, workshop & other infrastructure outside the MLA	-

v. Mining Plan details:-

- a) The Project Proponent has submitted that the Mining Plan along with the Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide Lr.No. MCDR-MPCOLST/7/2023-AJM-IBM-RO-AJM dated 30/05/2023 over an area of 287.7539 ha for 05 years period from the date of execution of the mining lease.
- b) The method of mining will be opencast mechanized mining with deep hole drilling and blasting.
- c) Total Mineral Reserves is estimated as 6,92,98,009.95 Tonnes and Minerals Resources estimated as 16,31,62,054.12 Tonnes. Life of the mine is estimated as 69 years based on current exploration.
- d) The mine benches will be formed with a bench height of 8m and bench width of 8m.
- e) During the first five years of the Mining Plan period, a total of 50,67,369.00 Tons of waste will be generated which will be stacked at the predefined place as per the approved Mining Plan. The top soil generated will be stacked and preserved at the earmarked places and will be utilized for the afforestation.
- f) Hydraulic excavators will be deployed to load the blasted limestone into the dump trucks. The loaded limestone will be fed to the crusher. Crusher location is still undecided and it may be decided at later stage.

vi. The total requirement of water will be around 75 KLD which will be sourced from existing pit rain harvested water and well water.

vii. The Project Proponent has submitted that the part of Village Basawa falls in the western part of block area upto almost 200m inside the area and village Nehron ki Dhani also observed in the southern part of the area up to 100 m within the area. PWD road from village Baswa to Chaurhani passes through Block area. State Highway SH-25B passes through Block Area in NW part of block area. There are 3 nos of existing old abandoned quarries with a broken up area of 2.89 Ha in the subject area of auctioned mining block as per the field observation.

viii. The Project Proponent has submitted that there is no forest land involved in the mine lease area. There is no national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve/coastal zone/archaeological site/historical places in the core (Block) and buffer zone (10 km radius of the block).

ix. The Project Proponent has submitted that the instant proposal does not envisage Rehabilitation and Resettlement (R&R).

x. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.

xi. The Project Proponent has submitted that the total cost of the project is Rs 134.17 Cr. About 185 persons (Direct: 85 persons + Indirect: 100 persons) will get employment.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area. The Project Proponent has informed the EAC that the State Highway (SH) 25Band public road from Village Baswa to Chaurhani passes through the mine lease area. There will be no diversion of public road. There are two villages on western direction and the other on southern direction are partly located within the mine lease area. The total mine lease area is 287.7539 Ha, out of which Private land is 267.036Ha and Govt. land is 20.7179Ha. The Project Proponent has also shown the patches of the Private land and Govt. land within the mine lease area. A school is located in the western side of the mine lease area. No National Park, Wildlife Sanctuary, ESZ/ESA located within 10 km radius of the study area.

The Project Proponent has informed the EAC that the mining activity will start from south eastern part of the mine lease area and will progress towards south western side of the mine lease area. As on date, G2 level exploration has been completed. G2 level exploration will be converted into G1 level exploration within 1st five years of plan period. The EAC asked the Project Proponent about the mineral transportation route. The Project Proponent has informed the EAC that the transportation route is not yet decided and will be decided in due course time depending upon the location of the cement plant. Till then, the material will be utilized in the sister plants in and around Rajasthan by and will be transported by road to a distance of about 250 – 300 km. Further, the Project Proponent has informed the EAC that there

are three old pits over an area of 2.89 ha existing in the mine lease area and these pits were in existence before the mine lease area was put up for auction. These are shallow pits created by the local people for construction of road. Agricultural activities are being taken place in the mine lease area. The Project Proponent also informed that there is another mine lease located adjacent to the instant mine lease sharing the common boundary of the mine lease area. In future, mining will be done in common boundary after obtaining statutory permission and agreement with the adjacent lease holder (M/s Dalmia Cement (Bharat) Ltd).

The Project Proponent has informed the EAC that the northern part of the mine lease area is non-mineralized zone. Dumps will be located in the non-mineralized zone. The EAC noted that to reach the waste dump, the Project Proponent has to cross the public road. The Project Proponent has informed the EAC that the road will be shifted in appropriate time or an underpass will be constructed for safe movement of material. The EAC observed that the Project Proponent has given two statements regarding the shifting of the public road. The EAC asked about the presence of Schedule-I species in the study area. The Project Proponent has informed the EAC that as of now reconnaissance survey has been carried out and no Schedule-I species reported. A detailed study will be covered in the EIA/EMP report. The EAC opined that the Project Proponent needs to carry out the enumeration of flora within the mine lease area before getting approval for tree cutting. The EAC asked the Project Proponent about the status of the R&R plan, since the land is not in possession with the Project Proponent, how the Project Proponent will ensure that the mining activity will take place. The Project Proponent has informed the EAC that the discussion with the local people for negotiation has been started and it is under process. The EAC was of the view that what will be scenario, if the land owners do not agree to give their lands.

The EAC noted that as per Common Application Form and as per approved mining plan, crusher is not a part of the proposal and whereas in Prefeasibility report, it has been mentioned that the crusher will be constructed at the time of execution of mine lease and the location of the crusher may be decided at a later stage. Further, cost of the crushing plant is also included in the Project Cost of Rs 134.17 Cr. The EAC was of the view it is not clear whether the Project Proponent is proposing to install a crusher within the mine lease area or not. The Project Proponent has informed the EAC that an area of 101 ha will remain unutilized at the conceptual stage. In this regard, the EAC noted that in Prefeasibility report submitted by the Project Proponent, it has been mentioned that an area of 96.7539 ha will remain unutilized. The statements made by PP were contradictory. The EAC was of the view that the Project Proponent needs to submit the exact pre and post land use plan as per approved mining plan. The Project Proponent has informed the EAC that the maximum production of 1.0 MTPA will be achieved in the 5th year. Mined out area will be partly rehabilitated and partly converted into water reservoir.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC observed that the Project Proponent has not yet decided the mineral transportation route. The EAC was of the view that atleast the Project Proponent should have come with the multiple options for transportation route and also the options for land acquisition with merits and demerits. The EAC noted that the Project Proponent/Consultant is not able to convince or justify the EAC about the mineral transportation route, need of a crusher, public road passing within the mine lease area and plan for land acquisition for determining the terms of reference. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the map showing the mineral transportation route to destination along with the design of the road.
- ii. The Project Proponent needs to clarify whether public road within the mine lease area will be diverted or an underpass will be proposed.
- iii. The Project Proponent needs to submit the exact pre and post land use plan as per approved mining plan.
- iv. The Project Proponent needs to clarify whether there is a requirement of crusher or not. Location of the crusher needs to be specified and transportation of crushed limestone to the required destination needs to be firmed up.
- v. The Project Proponent needs to submit the distance of the school from the Ultimate Pit Limit, strength of the school and the sequence of year wise mining operation near the school.
- vi. The Project Proponent needs to submit the plan for acquisition of land with merits and demerits.

3.1.5. Recommendation of EAC

Deferred for ADS

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Nahardih Maghaipur Limestone Block (ML Area: 365.252 ha) with limestone production capacity of 1.5 Million TPA at Village Pachari, Chhadia, Alesur, Maghaipur and Motimpur Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh of M/s. Nalwa Steel & Power Limited by NALWA STEEL AND POWER LIMITED located at

RAIPUR, CHHATTISGARH			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/CG/MIN/449681/2023	IA-J-11015/38/2023-IA-II(NCM)	21/10/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

1. The instant proposal is for mining of Limestone in Nahardih-Maghaipur Limestone Block of M/s. Nalwa Steel & Power Limited with Limestone production capacity of 1.5 Million TPA, Topsoil: 0.075 Million TPA, Over Burden: 0.88 Million TPA (Total Excavation: 2.45 Million TPA) along with mobile crusher of 400 TPH in the mine lease area of 365.252 ha, located at Villages Pachari, Chhodia, Alesur, Maghaipur and Motimpur-Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- The mine lease area is located between Latitude: 21°25'39.33"N to 21°25'58.70"N and Longitude: 81°57'39.33"E to 81°58'37.92"E. The mine lease area falls under the Survey of India Toposheet No: 64G/15 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) was issued through e-auction process conducted by the Govt. of Chhattisgarh.	04.08.2022	Limestone	3 years	Govt. of Chhattisgarh	365.252

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	352.574 ha
Government land	12.678 ha (Grazing land: 3.211 ha)
Forest Land	-
Total Mining lease area (MLA), Ha	365.252 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	RPR/Raipur/LST/1378/MP/2022-23
	Date	12.09.2023
	Mineral & (Major/Minor)	Limestone, (Major mineral)
	Mine Lease Area, Ha	365.252 ha
	Validity	5 years from the date of Mining Lease registration

Mining Parameters	Quantitative Description
Method of Mining	Fully Mechanized Opencast Mining Method.
Drilling/Blasting	Excavation will be done by mechanized opencast method using drilling and blasting. DTH drills and wet drilling will be used to develop ecofriendly mining. Diameter of the blast hole drill will be 150 mm. The blasting will be done by ANFO/SME/Slurry as column charge and slurry /cast booster explosive as booster charge. Controlled blasting will be practiced by using Nonel to reduce sound, ground vibration, back break, fly rock within the safe limit. Hydraulic rock breaker will be used for breaking oversized boulders in place of secondary blasting. All precautions for blasting and safety measures will be taken at the time of blasting and will be carried out by qualified/certified blaster.
Geological Reserves	122.22 Million Ton (As on 01/04/2022)
Mineable Reserves	85.11 Million Ton (As on 01/04/2022)
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 2.45 Million TPA <u>Breakup of Total Excavation:</u> 1. Limestone: 1.5 Million TPA 2. Top Soil: 0.075 Million TPA 3. Over Burden: 0.88 Million TPA
Life of mine	60 years (As on 01/04/2022)
Mine Bench Height & Bench Width	Bench height: 6.0 m (Maximum) Bench Width: 12 m (Minimum)
No. of Mine Benches	6 benches at conceptual stage
Existing Depth, m bgl	It's a greenfield project so not applicable.
Ultimate Depth of Mining, m bgl	245 m AMSL (42 m bgl)
Ground Water Table, m bgl	3- 5 m bgl
Details of ground water intersection	Water table will be intersected during the working and necessary permission will be taken before intersecting ground water table.
Individual bench slope	80°
Overall pit slope	45°
Details of existing/ proposed Crusher	Mobile crusher of 400 TPH will be installed
Mineral Beneficiation	Nil
RoM output size	Nil
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by tippers via haul road and it will be transported to end users via Road and Rail.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> - Total 0.07 million cu m of top soil will be generated during plan period which will be used in green belt generation. At the conceptual stage top soil generated will be used for Greenbelt and plantation. <u>Over Burden:</u> - During this Plan period, 0.46 million cu m Over burden will be Stacked at earmarked place and fully utilized for backfilling. - Approx 12.56 million cu m of overburden will be generated during conceptual stage and at the conceptual stage, OB generated will be used for backfilling excavated area.
Generation of Mineral Rejects/ Waste & its Management during plan period &	-

conceptual period

vi. Water requirement:

Total water requirement	110.0 KLD	Fresh Water	110.0 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump as and when developed		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be taken from State Govt. for using Ground water.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Pachari Village	~0.2 km in NW direction
Nearest Town	Kharora	~6.0 km in SW Direction
Nearest State/National Highway	NH -130 B	~4.0 km in SSE direction
Interstate Boundary	None	-
Railway Station/Railway line	Tilda Railway Station	~20 km in NW direction
Water Bodies	Tangna Nala	~3.0 km in North direction
	Kumhari Tank	~4.5 km in WNW direction
	Banjari Nala	~9.0 km in NW direction
	Chitawar Nala	~5.5 km in NNE direction
	Khorsi Nala	~5.0 km in ENE direction
	Mahanadi Canal (Lowar Branch)	~4.5 km in SE direction
	Mahanadi Canal (Baloda Branch)	~100 m in SSW direction
	Kosrangi Tank	~6.5 km in SSE direction
	Pindron Tank	~8.0 km in SSW direction
	Pikridih Tank	~8.5 km in WSW direction
School	Govt. New Middle School Chhadiya	~350 m in SW direction
Forest	Khulidabri Protected Forest	~3.0 km West direction
	Moheranga PF	~8.5 km in WNW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Certificate/letter from the concerned Department will be obtained during EIA study.
National Park	No	Certificate/letter from the concerned Department will be obtained during EIA study.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated	-	This proposal is for ToR, study will be carried out, if schedule - I Will found in the study area Wildlife

letter)		Conservation Plan will be prepared during the preparation of
Wildlife Conservation Plan	-	EIA/EMP Report.

ix. Green belt/Plantation details:

Proposed area for greenbelt/plantation and no. of saplings proposed	Total estimated greenbelt area on lease boundary will be 11.250 ha. and total area under plantation will be 86.424 ha (42.370 ha on backfilled area and 44.054 ha on undisturbed area).
Budget for green plant & plantation till the end of life of mine.	Rs 9.5 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	106
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	11.250 ha

x. Rehabilitation & Resettlement (R&R):

R & R details	- Total mine lease area is 365.252 ha, out of which 352.574 ha is private land. - Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 16.10.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit bearing no: R835030 dated 19.10.2023 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 300 Crores
Employment	96 persons

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The Project Proponent has informed the EAC that the instant mine was granted under auction and letter for grant of mining lease was granted by the State Govt. vide order dated 04.08.2022. Mining Plan was approved by Indian Bureau of Mines vide letter dated 12.09.2023. The total mine lease area is 365.252 ha, out of which Pvt land is 352.574 ha and Govt. land is 12.678 ha (including Grazing land of 3.211 ha). The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the 11 KVA transmission lines within the lease area and informed that during the plan period, safety barriers will be left in both sides of transmission line and all the transmission line will be diverted progressively up to the conceptual stage. The Project Proponent also shown the roads passing through the mine lease area on northern side and on southern side and informed that during course of mining, roads will be diverted. A nalah passes within the central part of the mine lease area will be diverted. Mining activity will reach the nalah after 30th year. Mining is proposed to a depth of 42 m bgl. The depth of the nalah is less than 1m. The EAC opined that no nalah should not be disturbed/diverted. No habitations are within the mine lease area.

The Project Proponent has shown the year wise working plan in the KML file. Mining activity will start from the northern side of the mine lease area. Backfilling will be started in the 15th year. Waste Dump is proposed in the eastern side of the mine lease area and mobile crusher is proposed to be on the western side of the mine lease area during the mining activity on northern side and then will be shifted to on the eastern side as the mining activity progresses from north to south. The maximum land is a private land within the mine lease area and land will be purchased with negotiation. Grazing land of 3.211 ha exists within the mine lease area and an alternate land will be provided. An area of 25 ha has been already purchased outside the mine lease area. An alternate land for grazing will be provided within the area of 25 ha. Under 25 ha, a provision has also kept to provide land for land compensation. Purchasing of land is in process and already negotiation has been done with the local people for purchasing about 145 acres of land. The EAC opined that while purchasing the land, the Project Proponent needs to consider the area from which the mining activity will progress, location of crusher, waste dump etc.,

The Project Proponent has informed the EAC that schools are located adjacent to the mine lease area. The strength of the nearest school is 121. During initial 10 years of mining operation, the mining activity will be 500m away from the school. The Project Proponent also informed the EAC that it is a non-captive mine and the mineral will be transported by road. A length of 2.5 km connecting to the Highway from the mine lease area will be developed as a separate road away from the village. The EAC opined that the Project Proponent needs to explore the possibility of utilizing the power from the solar energy. At the conceptual stage, an area of 309.948 ha will be excavated, out of which 267.578 ha will be converted into water reservoir and an area of 42.370 ha will be backfilled. Topsoil generated during plan period will be used in green belt development and during conceptual stage will be spread over the backfilled area and also will be used in plantation. Over burden will be stacked at earmarked place and fully utilized for backfilling.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s. Nalwa Steel & Power Limited for Nahardih-Maghaipur Limestone Block with Limestone production capacity of 1.5 Million TPA, Topsoil: 0.075 Million TPA, Over Burden: 0.88 Million TPA (Total Excavation: 2.45 Million TPA) along with mobile crusher of 400 TPH in the mine lease area of 365.252 ha, located at Villages Pachari, Chhodia, Alesur, Maghaipur and Motimpur-Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects: -

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

Ecology

1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.

Environment Monitoring and EMP

1.	
Greenbelt/Plantation	
1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Groundwater	
1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Mining Activity	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
Road Transportation	
1.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
R&R Plan	
1.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
Solar Energy	
1.	The Project Proponent needs to explore the possibility of utilizing the power from the solar energy.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC
Water	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

Crusher	
1.	The Project Proponent needs to submit the layout of crusher plant and measures to be adopted to reduce dust and noise.
Environment Protection	
1.	The Project Proponent needs to submit the site specific measures to protect the surface features in the mine lease area and in the vicinity of the mine lease area and also to submit the map demarcating the surface features and their safety distances left as per mines acts and rules.
Grazing land	
1.	The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.
Groundwater	
1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Environment Monitoring and EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Mining Activity	
1.	The project proponent needs to look into the diameter of the drill holes and spacing burden in respect with the bench height.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

3.2.6.2. Standard

1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.

3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the

	matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
Wildlife	
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.

Baseline Environment	
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
Water Environment	
1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
Hydro Geology	
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
Transportation	
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Land Acquisition and R&R	
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
Socio-Economic Environment	
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
Environmental Monitoring and Management	
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
Critically Polluted Areas, Aravali & CRZ	
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

Risk Assessment & Disaster Management	
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.
Miscellaneous	
1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Proposed Gothra-Parasrampura East Block (Auctioned Block) (Area 460.4006 ha) with Limestone Production Capacity 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with Installation of Crusher 1000 TPH with Screen/Wobbler at Villages: Devgaon, Shivnagar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan. by DALMIA CEMENT BHARAT LIMITED located at JHUNJHUNU, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/446436/2023	IA-J-11015/37/2023-IA-II(NCM)	21/10/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

1. The instant proposal is for mining of Limestone in Gothra Parasrampura East Block (Auctioned Block) of M/s Dalmia Cement (Bharat) Ltd. with proposed Limestone Production Capacity of 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with installation of Crusher 1000 TPH with Screen/Wobbler in the mine lease area of 460.4006 ha, located at Villages: Devgaon, Shivr Nagar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.

ii. The mine lease area is located between Latitude: 27°47'59.3189"N to 27°46'32.9662"N and Longitude: 75°20'50.0430"E to 75°23' 05.7004"E. The mine lease area falls under the Survey of India Toposheet No: G43D5 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S. No.	Prospecting License/Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent was issued vide letter No. P.2(27) Khan/Group-2/2022	08.03.2023	Limestone	2 Years Valid upto 07.03.2025	Directorate of Mines & Geology, Mines and Petroleum Department, Govt. of Rajasthan	460.4006

iv. Land Use/Land Cover of the Mine lease area:

Private land	438.9386 ha
Government land	13.0505 ha
Grazing Land	8.4115 ha
Forest land	-
Total Mining lease area (MLA)	460.4006 ha
Private land for crusher, workshop & other infrastructure outside the MLA	-
Additional information (if any)	1000 TPH Capacity of Crusher to be installed within the ML Pre-mining Land Use Area in Ha as per revenue record Remarks Private Khatedari Land 438.9386 Scattered Houses/structure & trees/shrubs exist on Pvt. Agricultural land Grazing Land 8.4115 Falls in Village Shivr Nagar (8.1333Ha) containing majority of consolidated habitation of BhilonkiDhani and Village NayaParasrampura (0.2782Ha). DCBL has proposed to surrender upon lease execution.

	Government Waste Land 13.0505 Government Wasteland includes area under: • Linear public utilities /structure like Roads, electric lines, telephone lines etc. -3.04 ha • Area under temple, crematorium, Power Substation etc.- 3.4 ha • Settlements, temple, Degraded Pits & Excavations etc. Settlements -- Settlements/habitation is spread in patches over an area of ~7.5312 Ha. Habitations are mostly on Govt. Land and Charagah Land. Degraded Pits & Excavation -- 7.57 Ha. Mostly in Govt. land including one ML of 1.942 ha held under ML no. 82/2000 Total 460.4006	

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	MCDR-MPC0LST/9/2023-AJM-IBM_RO_AJM
	Date	27.07.2023
	Mineral & (Major/Minor)	Limestone, (Major mineral)
	Mine Lease Area, Ha	460.40
	Validity	5 Years from the date of the Mine Lease Execution. Mining lease is yet to be granted and executed.
Mining Parameters	Quantitative Description	
Method of Mining	The proposed method of mining will be mechanized opencast method of mining with the use of HEMM with deep-hole drilling & blasting. It is proposed to mine with benches of 05 m height and 20m width for Overburden, 10m height and 30m width for Ore. The directions of movement of benches in south direction. Blast holes of 110-115 mm dia. are proposed to be drilled by using drill machine and blasting with ANFO with Booster charge bucket capacity excavation dumpers of 50 tonnes capacity and transported to wobbler & crusher combination for sizing.	
Drilling/Blasting	S. No. Parameter	

	Description	
	1 Bench Height 10m	
	2 DepthofBlasthole 11m	
	3 Burden 4m	
	4 Spacing 6m	
	5 Holediameter 110-115mm	
	6 Powder Factor 8.5 Tonnes/Kg	
Total Geological Resource	157.81 Million Tonnes	
Mineable Reserves	47.85 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Limestone Production Capacity: 3.0 Million TPA OB - 10.3191 Million TPA Soil- 1.271537 Million TPA Total Excavation: 14.590637 Million TPA	
Life of mine	~22 years (Based on the proposed exploration life of mine may change)	
Mine Bench Height&Bench Width	Bench Height: 5 to 10 m Bench Width: 20 to 30m	
No. of Mine Benches	16	
Existing Depth, m bgl	This is proposed mine	

Ultimate Depth of Mining, m bgl	114m BGL
Ground Water Table, m bgl	120 m BGL
Details of ground water intersection	Mining is proposed upto 114mbgl. The general ground water table will encounter at about 120 mbgl. Therefore, ground water regime will not be intercepted.
Individual bench slope	85°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of 1000 TPH capacity is proposed to be installed within the ML
Mineral Beneficiation	Screen/wobbler will be installed
RoM output size	75 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Excavated limestone will be transported to crusher by dedicated road through 60 tonner dumpers. The crusher is proposed within the area. This block has been auctioned for non-captive use. Hence, initially it is proposed to sell Limestone to cement plants and end use industries as and when required by road and subsequently DCBL has proposal to set up its own cement plant nearby for which crushed limestone for captive consumption will be transported via covered conveyor belt. Limestone sale to end-users will be by road.
Generation of Topsoil/OB & its Management during plan period & conceptual period	During Plan Period: 0.43 Million tonnes of soil will be generated which will be used in Greenbelt/Plantation and 8.4 Million Tonnes of waste will be generated which will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance. Area earmarked for Top Soil stacking is 7.4 Ha and Overburden/Waste Dumping 30 Ha. At Conceptual Stage: 3.46 Million Tonnes of soil to be generated which will be used in Greenbelt/Plantation and 212.64 Million Tonnes of waste to be generated which will be used in same will be used for backfilling in 123.14 ha exploited pit area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-
Additional information(if any)	Top soil generated will be used in Greenbelt/Plantation. Waste/OB will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance and remaining is proposed to be used for backfilling of excavated area.

vi. Water requirement:

Total water requirement	75.0 KLD	Fresh water	60.0 KLD
		Treated water	15.0 KLD
Source	Ground water and Mine Sump water as when developed.		
Permission for withdrawal/intersection along with details of grant and its validity	This proposal is for ToR. Details will be incorporated in EIA/EMP Report.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/ monument/forest:

Particulars	Particular's Name	Distance &Directions
Village	Minon Ki Dhani	Within the ML

	Shivnagar (Bhilon Ki Dhani)	Scattered Habitation Within the ML
	Devgaon	Scattered Habitation Within the ML
Town	Town: Nawalgarh	~ 9.0 km in NW Direction
	City: Sikar	~ 22.0 km in SW Direction
Highway	SH-25B	~ 1.8 km in West Direction
	SH-37	~ 8.5 km in East Direction
	SH-378	~ 9.0 km in SE Direction
	SH-8	~ 9.5 km in WNW Direction
Interstate Boundary	None	-
Railway Station/Railway line	Nawalgarh Railway Station	~12.0 km in NW Direction
Water Bodies	Udaipur Lohagarh Ki Nadi	~0.2 km in NE Direction
Forest	Shakambari Conservation Reserve/Raghunathgarh PF	~9.3 km in SE Direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No forest land fall within the ML
National Park	No	There is no National Park, Wildlife Sanctuary, Elephant/Tiger Reserves etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	Yes	Shakambari Conservation Reserve Boundary starts at 9.3 km SE, Notified by Govt. of Rajasthan vide Notification P.3(16)Van/2009 dated 09.02.2012 in the Raghunathgarh PF area.
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	-
Wildlife Conservation Plan	-	-

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total Greenbelt/Plantation: 178.70 ha Greenbelt (7.5 m): 8.28 ha Plantation: 170.42 ha (123.14 ha on Backfilled area, 35.46 ha on Bench Plantation & 11.82 ha on Reclaimed area) No. of Saplings Proposed: 1,70,420 (considering 1000 trees/ha)
Budget for green plant & plantation till the end of life of mine.	Rs. 3.4 Crores
Budget for nursery	Rs. 10 Lakhs
Details of existing plantation and its survival rate	Survival rate will be maintained 70- 80%
No. of tree cuts in the mine lease area and compensatory afforestation	~500 trees will be cleared Compensatory Afforestation: Total 1,70,420 trees will be Planted
Particulars for Green belt/plantation	Area covered (In Ha)
7.5 m barrier & non-mineralized zone	8.28 ha
50 m safety zone of nallah, roads, electric lines	~23.0 ha. of safety zone (50 m) along road is proposed
500 m safety zones of nearest habitation villages	-

x. Rehabilitation & Resettlement (R&R):

R & R details	Total mine lease area is 460.4006 ha comprises 438.9386 ha of Private land, 13.0505 ha of Government wasteland and 8.4115 ha of Grazing (Charagah) land. DCBL has following options for acquisition of land for its proposed mining project: • Option 1: Acquire land falling in the mining lease area through provisions of LARR Act, 2013 and rules made thereunder. • Option 2: Direct Purchase Mode: It is proposed to purchase the private agriculture Directly through mutual agreement with the land holders at negotiated rates and terms and conditions. Basis of Land Compensation will be in line of the RFCTARR Act 2013 (Right to Fair Compensation, Transparency in land Acquisition and Rehabilitation & Resettlement) or similar acts of Govt. of Rajasthan/Rules made by Govt. of Rajasthan under LARR. Options may also be evaluated to obtained land on lease/rental directly from the land owners at mutually agreed terms & conditions. • Option 3: Securing land by payment of the annual surface compensation under the provision of Sec. 24 of the MMDR Act, 1957 and Rule 51 of The MCR Rules, 2016. • DCBL proposes to procure land under Option 3. As per Land Schedule the mine site falls under 7 Revenue Villages. Total Project Affected Families are 335 out of which about 60 families (from core zone) is likely to be displaced falling in the mineralized zone/minable area. Displacement will be done in a phased manner with the advancement of mining operation and adequately compensated at a mutually agreed price. These details may be changed after the detailed study of R&R survey. Charagah land is proposed to be surrendered at the time of execution and consolidated habitation of village Bhilonkidhani on Charagah land will not be disturbed.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 03.10.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit dated 03.10.2023 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 250 Crores
Employment	85 persons

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the common lease boundary of the instant mine lease area sharing with M/s Shree Cement Ltd on the northern side which is under operation and also with M/s ACC Ltd on the western side. The Project Proponent also shown the Cement Plant belonging to M/s Shree Cement Ltd. Further, the Project Proponent has informed the EAC that after execution of the mine lease deed, the matter regarding mining in common boundary will be taken up with the adjoining lease holders as per 106(2)(b) of the Metalliferous Mines Regulations, 1961. Accordingly, amendment in EC will be obtained in future. Udaipur Lohagarh Ki Nadi is flowing adjacent to the mine lease area i.e., 200m on the eastern side. The nadi is mostly dry and water is observed during only in monsoon season. Raghunathgarh PF is located at a distance of about 9.5 km, SE from mine lease area. No water bodies present within the mine lease area. There were 6 old pits over an area of 1.942 ha existed within the mine lease area. The Project Proponent also informed the EAC that the State Govt. during the auction has informed that the old excavated areas shall be excluded during the grant of mining lease and accordingly mining plan was prepared by excluding the area of 1.942 ha and the same was approved by Indian Bureau of Mines vide letter dated 27.07.2023.

Further, the Project Proponent has shown the 7.5m barrier all around the mine lease boundary. The Project Proponent has also shown the two patches of the Charagah land, Govt. land and crematorium ground within the mine lease area and informed the EAC that the Charagah land of 8.4115 ha will be surrendered upon execution of the mine lease deed. The Project Proponent also informed the EAC that there are village roads passing through the mine lease area. Existing roads are proposed to be diverted in future and discussions are happening with the local people. After that, the matter will be pursued with the State Govt. to provide an alternate road at the cost of the Project Proponent. High Tension Line passing from NE-SW direction of the area of the Block will not be disturbed during the mining operation as it is falling outside the proposed Ultimate Pit Limit (UPL). LT lines may be re-aligned outside the UPL, if required at the time during advancement of mining operations. Habitations are also existing within the mine lease area. Scattered Habitation of village Devgaon & Minon Ki Dhani falling within the UPL will be shifted.

The Project Proponent has informed the EAC that the G2 level exploration has been completed and within 1st three years of mining plan period, exploration program will be completed. Backfilling has been proposed to start in the 10th years as per current exploration program and may change subject to detailed exploration. The Project Proponent has shown the conceptual plan. The EAC noted that the Project Proponent has proposed to achieve maximum production of 3.0 MTPA in the 10th year. The production has been kept low considering the land acquisition process. However, the mining plan will be modified in future depending upon the progress of the land acquisition. At the conceptual stage, an area of 223.19 ha will be excavated, out of which 64.59 ha will be converted into water reservoir, 123.14 ha will be backfilled and an area of 35.46 ha will be developed under bench plantation. An area of 178.70 ha will be developed under Greenbelt & Plantation at Conceptual Stage. Topsoil will be utilized for greenbelt/plantation and OB/Waste generated during plan period will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance and during conceptual stage will be used for backfilling in 123.14 ha of exploited pit area.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Dalmia Cement (Bharat) Ltd. for proposed Gothra Parasrampura East Block (Auctioned Block) with Limestone Production Capacity 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with installation of Crusher 1000 TPH with Screen/Wobbler in the mine lease area of 460.4006 ha, located at Villages: Devgaon, Shivnagar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

3.3.5. Recommendation of EAC

Recommended

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

Biodiversity Conservation Plan

1.	The Project Proponent needs to submit the Biodiversity Conservation Plan to ensure no net loss to biodiversity (Shakambari Conservation Reserve: 9.3 km SE).

Plantation & Greenbelt	
1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
Ecology Restoration	
1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
Plantation & Greenbelt	
1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Groundwater	
1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
Mining activity	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
Groundwater	
1.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Water quality	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
Environment Protection	
1.	The Project Proponent needs to submit the site specific measures to protect the surface features in the mine lease area and in the vicinity of the mine lease area and also to submit the map demarcating the surface features and their safety distances left as per mines acts and rules.
Groundwater	

1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Road Transportation	
1.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
R&R Plan	
1.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
Monitoring and EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
2.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
Monitoring and EMP	
1.	The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity of the proposed mine, existing mines, cement plant and other operating mines including the transport scenario in the study area and also should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters and data used for each activity of the modeling also needs to be submitted at the time of appraisal of EC.

3.3.6.2. Standard

2(b)	Mineral beneficiation
null	
1.	The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.
2.	Details of the technology and process involved for beneficiation should be given. .
3.	Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.

4.	Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.
5.	Estimation of the fines going into the washings should be made and its management described.
6.	Details of the equipment, settling pond etc. should be furnished.
7.	Detailed material balance should be provided.
8.	Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.
9.	Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.
10.	The water requirement for the project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the project should also be indicated.
11.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.
12.	All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.
13.	All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).
14.	It should be clearly indicated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
15.	Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.
16.	The study area will comprise of 10 km zone around the Plant.
17.	Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.
18.	Location of Railway siding with its handling capacity and safety measures should be indicated.
19.	Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.
20.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
21.	Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.

22.	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the Project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
23.	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
24.	A study shall be got done to ascertain the impact of the Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.
25.	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
26.	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
27.	Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.
28.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
29.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects, should be discussed in the report.
30.	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site- specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the pre-dominant downwind direction. The mineralogical composition of PM ₁₀ , particularly for free silica, should be given.
31.	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the

	habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
32.	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
33.	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished. .
34.	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
35.	Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.
36.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
37.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to the pollution.
38.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.
39.	Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.
40.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area should be be detailed.
41.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
42.	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
43.	Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
44.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
45.	A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.
46.	Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

47.	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of project as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should also be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified Report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project by the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent

	bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

Forest

1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

Court Matters

1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

Land Environment

1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land

	(government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

Wildlife

1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.

Baseline Environment

1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.

Water Environment

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided.

	Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

Hydro Geology

1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

Transportation

1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Land Acquisition and R&R

1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

Socio-Economic Environment

1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound

	Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

Environmental Monitoring and Management

1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

Critically Polluted Areas, Aravali & CRZ

1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

Risk Assessment & Disaster Management

1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Miscellaneous

1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are

available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

M/s Mangalam Cement Limited, Limestone Mine Project (Lease Code - PB20), Village - Kathiya - Pachri, Tehsil- Tilda, District- Raipur, State- Chhattisgarh. by MANGALAM CEMENT LIMITED located at RAIPUR, CHHATTISGARH			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/CG/MIN/444676/2023	IA-J-11015/35/2023-IA-II(NCM)	13/10/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

1. The instant proposal is for Limestone mining project of M/s Mangalam Cement Ltd for proposed production capacity of 32,08,690.3 TPA (ROM) Saleable Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA in the mine lease area of 323.332 ha, located near Village- Kathiya - Pachri, Tehsil- Tilda, District- Raipur, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- The mine lease area is located between Latitude: 21°27'27.50766"N to 21°28' 21.22912"N and Longitude: 81°54'57.38042"E to 81°56'52.53573"E. The mine lease area falls under the Survey of India Toposheet No: 64G/15 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

Sr. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral&(Major /Minor)	Period of Grant	Granted by	Mine lease area in Ha.
1	LoI No- F 3-04/2021/12, Nava Raipur, Atal Nagar,	04/08/2022	Limestone (Major Mineral)	3 Years	Joint Secretary Chhattisgarh Government Mineral Resources Department New Raipur	323.332

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	250.647 Ha.
Government land	72.685 Ha.
Forest land	Nil
Total Mining lease area (MLA), ha	323.332 Ha.
Private land for crusher, workshop & other infrastructure outside the MLA	Nil (Not Proposed)

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	RPR/RAIPUR/LIMESTONE/1381/MP/2023-24
	Date	14/07/2023
	Mineral & (Major/Minor)	Limestone (Major Mineral)
	Mine Lease Area, Ha.	323.332
	Validity	5 Year from date of agreement
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mechanized Mining	
Drilling/Blasting	Deep Hole wet Drilling & Blasting Diameter of hole – 110 mm, Depth of hole= 6.0m Explosive required per month = 75,000 kg	
Geological Reserves	21,17,79,706.0Tonnes	
Mineable Reserves	16,54,51,198 Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation 32,08,690.3 TPA (Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA)	
Life of mine	50 Years from the date of registration.	
Mine Bench Height& Bench Width	Mine Bench Height 6m & Bench Width 15m	
No. of Mine Benches	3 benches (during plan period)	
Existing Depth, m bgl	Highest - 297mRL Lowest- 288mRL	
Ultimate Depth of Mining, m bgl	63 mbgl	
Ground Water Table, m bgl	Water Table 261mRL (27 mbgl Post monsoon) 258mRL(30 mbgl Pre monsoon)	
Details of ground water intersection	Proposed Mining depth is only 18mbgl, so there will no water intersection in next five years.	
Individual bench slope	60°	
Overall pit slope	37°	
Details of existing/ proposed Crusher	Not proposed	
Mineral Beneficiation	Not proposed	
RoM output size	0.5m ³ (max.)	
Transportation details including capacity of dumper/tipper, mode of transport and distance	Mode of transportation = Dumpers Number of Dumpers = 5 Capacity of Dumper =25 Tonner Lead Distance = 2 km	

Generation of Topsoil/OB & its Management during plan period & conceptual period	Top soil generated during plan period = 4,91,892.8tonnes (3,51,352 m ³) Top soil generated during conceptual period = 74,16,598tonnes (5,297,570 m ³) Top soil shall be Utilized for plantation.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	No mineral waste and reject shall be generated during plan period.

vi. Water requirement:

Total water requirement	71.0 KLD	Fresh water	4.0 KLD
		Treated water	67.0 KLD
Source	Water for Drinking & Domestic shall be taken by Govt. Supply and nearby villages Kathiya. Surface water accumulated in the existing pit shall be used for dust suppression and plantation.		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission of water intersection shall be taken before intersection of ground water table.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance &Directions
Village	Kathiya - Pachri	Kathiya 0.40 km in North direction. Pachri 0.70 km in SE direction
Town	Tilda	14.85km in NW direction
Highway	NH-130B TildaSimga Road	7.30 km in South direction 3.827 km in SW direction
Interstate Boundary	Nil	Nil
Railway Station/Railway line	Tilda Railway station	About 15.85 km in NW direction
Water Bodies	Pond, Pachri Pond, Kumhari Tank Keotara Pond, BharuwadihKalan NaiyaTalab, Mohra Pond, Pindraon Tank Pond, Jara Pond, Kesla JamuniyaNala TangnaNala KhorsiNala Pond, Parsada BanjariNala	(About 207.52 meter in SE direction) (About 314 meter km in NW direction) (About 0.51 km in West direction) (About 4.35 km in NE direction) (About 6.013 km in SW direction) (About 6.55 km in NE direction) (About 6.60 km in SE direction) (About 7.00 km in West direction) (About 7.60 km in NE direction) (About 7.75 km in SE direction) (About 8.30 km ion SE direction) (About 8.45 km in North direction)
Forest	Khaulidabri Protected Forest Mohrenga Protected Forest	About 643.40 m in SW direction About 3.827 km in SW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	-No-	-
National Park	-No-	-
Wildlife Sanctuary	-No-	-

Elephant/Tiger Reserve	-No-	-
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	-No-	-
Coastal Regulation Zone (CRZ)	-No-	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Will be submitted with EIA/EMP if Applicable	-
Wildlife Conservation Plan	Will be submitted with EIA/EMP if Applicable	-

ix. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Proposed area of green belt - 2.67 ha per year. No. of Sapling proposed per year = 2668
Budget for green plant & plantation till the end of life of mine.	INR 26,68,000 per year, INR = 10,67,20,000 at the end of life of mine.
Budget for nursery	Nil
Details of existing plantation and its survival rate	Number of existing trees -950 survival rate 90%
No. of tree cuts in the mine lease area and compensatory afforestation	950 tree cuts at the end of life of mine
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	6.95 hectare statutory barrier & 20.60 hect. Non mineralized area.
50 m safety zone of nallah, roads, electric lines	Both side of road -79.17 hect.

x. Rehabilitation & Resettlement (R&R): -

R & R details	Rehabilitation and Resettlement (R&R) is not involved in this project.

xi. Court case details: -

Court Case, No and its present status	The Project Proponent has submitted an affidavit dated 02.11.2023 stating that there is no litigation pending against the project and/or land in which the project is proposed to be set up and that for any such litigation whatsoever, the sole responsibilities will be borne by the Project Proponent.
Undertaking by Project Proponent w.r.t court case	

xii. The Project Proponent has submitted the Affidavit dated 02.11.2023 stating that there is no violation of provisions of EIA Notification dated 14.09.2006 and amendments made thereafter, circulars and OM issued their under.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 162.46Crores
Employment	120persons

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and informed the EAC that the total mine lease area is 323.332 ha. A State Highway is passing adjacent to the mine lease area on north eastern side. A Protected Forest is located on the south western side of the mine lease area. A water body is located at a distance of 0.3km on north western side of the mine lease area. A kuttcha road is passing within the mine lease area. A poultry farm is located within the mine lease area. No habitations are found within the mine lease area. The EAC noted that there are old pits existing in the mine lease area. The Project Proponent has informed the EAC that the lease area mostly comprises of Private land of 250.647 ha and Govt. land of 72.685 ha.

The EAC asked about the evacuation route of the mineral. The mined out mineral will be transported to the Cement plant around 10 km radius by State Highway. Width of the road is found to be 30 ft. A cement plant is also planned to propose on the north western side of the mine lease area. Ground water will be intersected during the working and necessary permission will be taken before intersecting ground water table. The Project Proponent has informed the EAC that the instant mine was granted under auction and letter for grant of mining lease was granted by the State Govt vide order dated 04.08.2022. Mining Plan was approved by Indian Bureau of Mines vide letter dated 14.07.2023. No National Park, Wildlife Sanctuary, ESA/ESZ is found within 10km radius of the study area. The EAC asked the Project Proponent to increase the no. of saplings proposed. The EAC noted that in common application form, the Project Proponent has inadvertently mentioned that the crusher is proposed to be installed within the mine lease area and also noted that the crusher is not a part of the proposal as per approved mining plan. The EAC asked about the location of the crusher. The Project Proponent has informed the EAC that crusher is proposed to be located in the Cement Plant.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Mangalam Cement Ltd for proposed production capacity of 32,08,690.3 TPA (ROM); Saleable Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA in the mine lease area of 323.332 ha, located near Village- Kathiya - Pachri, Tehsil- Tilda, District- Raipur, Chhattisgarh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Terms of Reference

3.4.6.1. Specific

Cost Benefit Analysis	
1.	The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.
Greenbelt and Plantation	
1.	
Groundwater	
1.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
2.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

Illegal mining	
1.	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Chhattisgarh during the appraisal for EC, clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s Mangalam Cement Ltd or not?
Poultry farm	
1.	The Project Proponent needs to submit the distance of the Ultimate Pit Limit from the Poultry farm. A detailed note on how the Project Proponent shall ensure that the mining activity will not have impact on the poultry farm inside the mine lease area shall be submitted. The Project Proponent also needs to explore the possibility of shifting the poultry farm along with the timeline and cost.
Road Transportation	
1.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC
Total excavation	
1.	The Project Proponent needs to provide the exact breakup of total excavation including Production/ROM, Mineral Rejects, Topsoil, OB, Waste per year in first five year plan period.
Water bodies	
1.	The Project Proponent needs to address the impacts and mitigation measures arising out of the mining activity to nearby water bodies in the vicinity of the mine lease area.
Environment Monitoring & EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
Grazing land	
1.	The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.
Water bodies	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
Groundwater	
1.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central

	Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Environment Monitoring & EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Greenbelt and Plantation	
1.	The Project Proponent needs to increase the no. of saplings proposed. The Project Proponent also needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

3.4.6.2. Standard

1(a)	Mining of minerals
Project Details	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
2.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.

7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
10.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
11.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
12.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
13.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
14.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
15.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
16.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

Forest

1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
Wildlife	
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
3.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
Baseline Environment	
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
2.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.

3.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
Water Environment	
1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
2.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
Hydro Geology	
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
2.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
3.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
Transportation	
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
Land Acquisition and R&R	
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
Socio-Economic Environment	
1.	Public health implications of the Project and related activities for the population in the impact zone should be

	systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.

Environmental Monitoring and Management

1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

Critically Polluted Areas, Aravali & CRZ

1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

Risk Assessment & Disaster Management

1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
2.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
3.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Miscellaneous

1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Amendment in Environmental Clearance of Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for 5 years w.e.f. 23.01.2024, located in Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand by STEEL AUTHORITY OF INDIA LTD located at WEST SINGHBHUM, JHARKHAND			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/JH/MIN/445601/2023	J-11015/251/2009-IA-II(M)	12/10/2023	Mining of minerals (1(a))

3.5.2. Project Salient Features

The instant proposal is for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for 2 years w.e.f. 23.01.2024, located at Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand. 2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level. ii. Details of previous Environmental Clearance (EC): a) Initially, the Project Proponent has obtained Environmental Clearance on 24.01.2012 for Dhobil Iron Ore Mining Project for production capacity 0.75 MTPA of Iron Ore over an area of 513.036 ha. b) Then, the Project Proponent obtained amendment in EC on 01.05.2012 w.r.t specific condition no (v) stating that "Necessary wildlife clearance, as applicable, shall also be obtained". c) Further, the Project Proponent has obtained amendment in EC on 19.04.2017 to the effect that transportation of Iron ore is allowed for further 5 years w.e.f 23.01.2017 onward through road with the condition that the project proponent will put in place the conveyor system for transportation of Iron ore within 5 years. d) Again, the Project Proponent obtained amendment in EC on 04.04.2022 for continuation of iron ore transportation through road for another 2 years w.e.f 23.01.2022 located in Village Dhobil, Tehsil Manoharpur, District West

Singhbhum, State Jharkhand. If Project proponent does not stand upto the commitment provided vide letter dated 19.03.2022, the production may get curtailed to minimise the air pollution due to transportation of ore through trucks.

iii. Now, the Project Proponent has requested for amendment in EC dated 24.01.2012 for continuation of iron ore transportation through road for 5 years w.e.f. 23.01.2024.

iv. Justification for amendment in EC:

a) The Project Proponent has submitted that the Manoharpur Ore Mines (MOM), Chiria consist of six mining leases i.e. Ajitaburu, McLellan, Ankua, Tatiburu, Sukri-Lutur & Dhobil. Dhobil Iron Ore Mining Leasehold area under Monoharpur Ore Mines, Chiria covering an area of 513.036 ha is located in West Singhbhum District of Jharkhand and falls entirely within Ankua Reserve Forest (R.F.) of Saranda Forest Division. At present only Dhobil is in operation.

b) Iron Ore from Dhobil mines is transported by road (~31 km) to the railway siding situated at Manoharpur and loaded into railway wagons for dispatch. The 31 km long route through which the ore is trucked to Manoharpur Railway Siding comprises of forest road, State Highway No. 4 (SH4) and the connecting road from SH4 to the railway siding.

c) For development of Manoharpur Ore Mines, Stage-I FC over an area of 595.075 ha for Manoharpur Group of Mining Leases (2376.122 ha) was granted by MoEFCC on 07.03.2011. Post approval of Management Plan for Sustainable Mining (MPSM), MoEFCC sought some information on 10.08.2018, which was submitted by Govt. of Jharkhand on 07.06.2019. However, grant of Stage-II FC for an area of 595.075 ha is pending with MoEFCC, due to No-Mining Zone issue of Management Plan for Sustainable Mining (MPSM) of Saranda Forest Division.

d) Accordingly, for evacuation of iron ore from Manoharpur Group of Mining Leases, the proposal for diversion of 14.88 ha of forest land for installation of LDDB was submitted online on 31.01.2017. The proposal was considered by REC, MoEFCC, Ranchi on 11.03.2019. However, grant of FC over 14.88 ha is pending due to No-Mining Zone issue of MPSM.

e) Though the mining leases under Manoharpur Ore Mines are falling within the No mining Zone of MPSM, however MoEFCC, New Delhi has permitted mining only within already broken area of Dhobil lease as an exception. Forest Clearance was obtained vide Lr No. 8-20/98-FC dated 21.10.1998 under section-2 of Forest (Conservation) Act, 1980 for diversion of 29.411 ha of forest land (already broken up area). At present all mining and allied activities are confined within broken area only.

f) The grant of above forest clearances are yet to be resolved which is beyond the control of SAIL. In order to ensure uninterrupted supply of iron ore to SAIL Steel Plants and also to enable SAIL-BSL to contribute to the socio-economic development of region, continuation of ore transportation through road for 5 years w.e.f. 23.01.2024 from Dhobil Lease to Manoharpur Railway Siding is very much essential.

v. Details of Mine Lease:

a) The Project Proponent has submitted that the Govt. of Jharkhand vide letter dated 07.03.2018 have renewed the 2nd renewal period of Dhobil lease from 08.03.1998 to 07.03.2018 (20 years) and further extended the period of mine lease from 08.03.2018 to 07.03.2038 (20 years) as per Mineral (Mining by Government Company) Rules, 2015. Subsequently, lease deeds for both the periods were executed on 21.04.2018.

vi. Mining Plan:

a) The Project Proponent has submitted that the Review of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM) vide Letter No. RAN/WSB/Fe/MP-10/2021-22 dated 15.11.2021 in respect of Dhobil lease area of 513.036 Ha. The approval is given for the received proposals as applicable from this date for the mining activities to be carried out within the extended area of 29.411 ha.

vii. Forest Clearance:

a) The Project Proponent has submitted that the entire mine lease area of 513.036 Ha is a forest land. Forest Clearance was obtained vide Lr No. 8-20/98-FC dated 21.10.1998 under section-2 of Forest (Conservation) Act, 1980 for diversion of 29.411 ha of forest land (already broken up area).

viii. Environmental Status:

a) The Project Proponent has submitted that the present Environmental status was analyzed on the basis of baseline environmental data generated for one month during April - May, 2023 by Environmental Engineering Laboratory of MECON Ltd. (a Govt. of India U/T under the Ministry of Steel). The data includes micro-meteorological conditions, ambient air quality (11 locations), noise levels (11 locations), water quality (Groundwater: 2 locations and Surface water: 8 locations) and traffic density (4 locations). The collected data has been analysed in detail for identifying, predicting and evaluating the environmental impacts due to continuation of existing road transportation of Dhobil Iron Ore Mine.

b) The Project Proponent also submitted that the baseline data levels show that the contributions due to the continuation of ore transportation through road will have insignificant impact on the existing ambient air quality. The environmental monitoring carried out by SAIL within the nearby areas revealed that the air, noise and water quality in and around the mines are well within the respective standards. The traffic studies revealed that the entire ore transport road is capable of handling the ore transport from Dhobil Iron ore mine with adequate buffer capacity. Once the covered conveyor is commissioned, ore transport from Dhobil Mines to Manoharpur siding shall be carried out exclusively through covered conveyor.

ix. Certified Compliance Report (CCR):

a) The project was monitored for ascertaining compliance to the conditions stipulated in the environmental clearance by the Regional Office of this Ministry at Ranchi on 03.08.2021, which has submitted their reports to Ministry vide

letter No. 103- 356/12/EPE/4911 dated 27.09.2021. The report has been examined by the Ministry.

b) A letter seeking ATR/clarification on the observed non-compliance was issued to M/s. Steel Authority of India Limited (SAIL) by Ministry vide letter no. IA-J-11014/53/2021-IA-I dated 01.12.2021 for which M/s. Steel Authority of India Limited (SAIL) submitted a response vide letter dated SAIL/MOM/EC/2021-22/449 dated 17.01.2022.

c) IRO, Ranchi provided their observations on the Action Taken Report (ATR) submitted by M/s. Steel Authority of India Limited (SAIL) vide letter No. 103-356/12/EPE/061 dated 21.01.2022. The report has been examined by the Ministry and it was observed that there is still substantive non-compliance of environmental conditions contained in said EC letter No. J-11015/251/2009-IA II (M) dated 24.01.2012 and the same are as enlisted below:

1. STP has not been installed in the Colony. (Specific Conditions: xxvii)
2. Mining technology and scope of working has not been followed without prior approval of the Ministry of Environment & Forests. (General Conditions: i)

d) The existing operations at Dhobil ML have been inspected by the IRO, MoEF&CC, Ranchi on 17.01.2022 and reported as follows:

Observation by Integrated Regional office, Ranchi MoEF&CC, report date 27.09.2021.	Integrated Regional Office Ranchi MoEF&CC on the basis of site inspection dated 17.01.2022 and action taken reports and other documents submitted by Project proponent.
i. In the EC it was mentioned that "No crushing plant is proposed as part of this project". However, two mobile crushing units were observed in the mine project during inspection. PP should explain the reasons for above deviation from the EC.	Two crushing units were observed in the mine project during inspection on 17.01.2022 PP has explained the reason for deviation from EC condition as can be seen in adjacent column. PP explains that "it was envisaged to development common crushing plant of 7.0 MTPA capacity in Ajitaburu leasehold for crushing of ROM from Dhobil, Ajitaburu MClelan and Sukri Luturburu leases of Manoharpur Ore Mines. Due to delay in Forest Clearance for Ajitaburu lease common crushing plant could not be installed as envisaged. To fulfill the crushing requirement mobile crushing units were installed in the Dhobil mine", Final decision on the compliance of this condition may be taken by MOEF&CC. New Delhi.

e) As explained above, till date no mining operations and the envisaged Common C&S Plant for sizing of the ore from all the four MLs as per the EC grant order at Ajitbura ML could not be installed till date for want of Stage-II FC from MoEF&CC Accordingly, the existing mining operations at Dhobil ML is being continued without changing any mining technology and scope of the work since grant of EC dated 24.01.2012. Therefore, the Project Proponent requested to consider their submission and to withdraw the Show Cause Notice dated 17th May, 2023 issued under Section 5 of Environment (Protection) Act 1986 w.r.t Dhobil Iron Ore Mining Project of SAIL.

f) The Compliance & Monitoring Division of this Ministry vide letter dated 17.05.2023 issued Show Cause Notice under section 5 of Environment (Protection) Act, 1986 to Dhobil Iron Ore Mining project of M/s SAIL.

g) The Project Proponent has submitted their response to the Show Cause Notice dated 17.05.2023 to the Ministry vide letter dated 12.06.2023.

h) The Project Proponent has submitted the Certified Compliance Report (CCR) issued by the Regional Office (RO) vide letter dated 12.09.2023 for the EC's dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022. Site Inspection was conducted by RO on 28.07.2023. Non-Compliances were observed by RO w.r.t non-installation of STP/ETP, density of the plantation, solar powered electric fencing and change in mining technology.

i) Then, the Project Proponent has submitted the action taken report to the Regional Office on 21.09.2023 for the non-compliances identified by RO.

x. Past Production details:

a) The Project Proponent has submitted the certified past production details issued by the District Mining Officer vide letters dated 08.11.2014, 29.10.2021 and 06.05.2023 for the period 1993-94 to 2022-23.

Financial Year	Certified ROM Production (Metric Tonnes)
1993-94	66,616.73
1994-95	92,974.45

1995-96	68,261.58
1996-97	1,55,183.40
1997-98	97,722.10
1998-99	1,02,940.60
1999-00	1,42,564.90
2000-01	3,36,994.50
2001-02	2,82,810.00
2002-03	2,73,463.30
2003-04	3,00,328.70
2004-05	3,11,058.70
2005-06	4,38,590.00
2006-07	7,90,127.20
2007-08	9,64,527.00
2008-09	5,58,748.98
2009-10	6,83,968.00
2010-11	3,05,035.00
2011-12	3,48,855.00
2012-13	4,43,187.01
2013-14	4,08,964.48
2014-15	3,27,029.83
2015-16	4,50,784.89
2016-17	5,55,166.07
2017-18	4,43,592.69
2018-19	7,29,308.48
2019-20	7,33,794.93
2020-21	5,53,841.03
2021-22	75,251.75
2022-23	3,41,182.29

xi. Details of Violation/Court Cases:

1. The Project Proponent has submitted that with regard to the allegations of excess production prior to the grant of the EC, MoEFCC has communicated the violation of Environment (Protection) Act 1986 occurred at the Dhobil Iron Ore Mine vide letter No.- J-11015/251/2009-IA(II).M dated 20.04.2011 that the production from the mine was enhanced without obtaining the requisite Environmental Clearance as required under EIA Notification, 2006. Based on this, criminal proceedings were initiated by the JSPCB as well as the resolution was passed based on the specific direction of MoEFCC on 20.04.2011. Recently, the case has been disposed-off on 24.04.2023.
2. Subsequent to the final judgment dated 02.08.2017 of Hon'ble Supreme Court of India in the matter of Common Cause (i.e., Unlawful mining in Odisha), the Government of Jharkhand has issued the Demand Notice to SAIL – Dhobil Iron Ore Mines vide demand Letter No. 1352/M dated 07.09.2017 amounting to Rs. 228,13,04,898/- towards recover price of mineral produced without or beyond the EC capacity for payment on or before 31.12.2017.
3. In order to mitigate the risk of closure of Dhobil Mining Lease beyond 31.12.2017, M/s SAIL filed a Writ Petition bearing No. 7016 of 2017 – Steel Authority of India Ltd Vs. State of Jharkhand &Ors. before the Hon'ble High Court of Jharkhand at Ranchi on 04.12.2017.
4. An amount of Rs. 199.84 Cr. was paid by SAIL to Government of Jharkhand under protest prior to 31.12.2017 to avoid the stoppage of mining operations.
5. On subsequent hearings, the Hon'ble High Court vide order dated 21.02.2018 referred the matter to the Division bench of the Jharkhand High Court since it involves substantial questions of Law. The Hon'ble High Court also directed that during the pendency of writ petition transit challans for the petitioner companies shall not be stopped until the interim orders passed by this Court are varied, modified or recalled. The matter is sub-judice before the Division Bench of the Hon'ble High Court of Jharkhand.

6. Further, the Project Proponent has also submitted the Affidavit in a non-judicial stamp paper of Rs. 20 bearing dated 24.06.2023 stating that Manoharpur Ore Mines (Dhobil Mining Lease -513.036 Ha.) of SAIL -Bokaro Steel Plant shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of Common Cause versus Union of India and Ors, subject to the result of the pending Writ Petitions before Hon'ble High Court of Ranchi further appeals thereto if need arises.

3.5.3. Deliberations by the committee in previous meetings

N/A

3.5.4. Deliberations by the EAC in current meetings

The Project Proponent has informed the EAC that the instant proposal is for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project for continuation of iron ore transportation through road upto Manoharpur Railway siding for a period 5 years w.e.f. 23.01.2024. The Project Proponent also informed the EAC that there is no change in existing scenario. Presently, the mineral is being transported from Dhobil Iron Ore Mining to Manoharpur Railway siding at a distance of 31 km by road. Due to non-availability of forest clearance, development of Manoharpur Ore Mines (595.075 ha) and installation of Long Distance Belt Conveyor (14.88 ha) has been held up. Mining activity is restricted to 29.411 ha of forest land (already broken up area) and FC is valid upto 07.03.2038. Further, the Project Proponent has informed the EAC that in order to ensure uninterrupted supply of iron ore to SAIL Steel Plants and also to enable SAIL-BSL to contribute to the socio-economic development of region, continuation of ore transportation through road for 5 years w.e.f. 23.01.2024 from Dhobil Lease to Manoharpur Railway Siding is very much essential.

The EIA Consultant has informed the EAC that to assess the environmental status baseline data was collected for one month during April - May, 2023 by Environmental Engineering Laboratory of MECON Ltd. (a Govt. of India U/T under the Ministry of Steel). The traffic density was carried out at 4 locations. The present traffic volumes on all the roads are well within the respective capacities as per IRC:64. Predominant wind directions are from West followed by North direction. The air pollutant parameters are well within the NAAQS norms. The mean noise levels at all the ambient locations are well within the respective norms of the type of area. The Project Proponent has also shown the photographs of the air pollution control measures being implemented, plantation undertaken on waste dump, transport route, near office and surface water management structures.

The Project Proponent informed the EAC that the site Inspection was conducted by Regional Office (RO), MoEF&CC on 28.07.2023 and Certified Compliance Report (CCR) was issued by the RO vide letter dated 12.09.2023 for the EC's dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022. The PP submitted the action taken report to the RO on 21.09.2023 w.r.t non-installation of STP/ETP, density of the plantation, solar powered electric fencing and change in mining technology. Further, the Project Proponent informed the EAC, that, during inspection, RO was informed that No crushing plant was proposed as part of the instant project (Dhobil). However, crushing units were observed by the RO representative in the mine lease area during inspection and the same was report in Certified Compliance Report by RO Ranchi. The Project Proponent informed the EAC that a common Crushing & Screening units was proposed to be installed at Ajitaburu ML for size reduction of ore from all four ML including Dhobil ML. Accordingly, it was mentioned in EC grant Order of Ajitaburu ML dtd 31.03.2011 that *"It is proposed that an additional common crushing & screening plant of 7 million TPA will be established as part of this mine lease"*. Further, it was also mentioned in the preamble (Para - 4) of the EC grant Order of Dhobil ML dtd 24.01.2012 that *"No Crushing Plant is proposed as part of the project. It was committed by the proponent that ore transportation by road will be undertaken only for five years and thereafter it will be by conveyor only"*. With regard to above, PP further informed that in the EIA report, it was already mentioned that the details of the mining operations of Dhobil mining lease which states that blasted ROM will be fed to the mobile crushing and screening plant. The EAC noted the submission of the project proponent and observed that the use of mobile crusher till installation of common crushing unit as mentioned in the EIA report.

The PP further mentioned that the Hon'ble High Court in WP (C) 7016 of 2017 vide order dated 21.02.2018 referred the matter (regarding demand notices issued in light of the Hon'ble Supreme Court judgement dated 02.08.2017) to the Division bench of the Jharkhand High Court since it involved substantial questions of Law. The Hon'ble High Court also directed that during the pendency of writ petition transit challans for the petitioner companies shall not be stopped until the interim orders passed by this Court are varied, modified or recalled. As on date the matter is sub-judice before the Division Bench of the Hon'ble High Court of Jharkhand. The Project Proponent has also informed the EAC that there is no change in configuration w.r.t mine lease area and production capacity. The existing road transport infrastructure is capable of handling the ore-transportation load from Dhobil Mines through the permitted transport road.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the road

transportation may be permitted for 2 years considering the pollution load. The EAC also opined that the PP may continue using the mobile crusher and screening for sizing the ore before transportation of the same by road to the railway siding as mentioned by it in the earlier EIA report submitted during the grant of EC in the year 2012. The Committee also recommended that a field visit may be undertaken along with the pending visit of Kiriburu-Meghahatuburu Iron Ore Mines of Steel Authority of India Limited (SAIL) for real time appraisal on ground realities for facilitating the decision making in case of the instant project in near future. Based on the discussions held, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and its subsequent amendments therein; **recommended** the proposal for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for a period of 2 years w.e.f. 23.01.2024, located at Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand along with the following additional specific conditions mentioned below: -

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Environment Conditions

3.5.6.1. Specific

Crushing/Screening	
1.	The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
Mining Activity	
1.	Mining activity is restricted to an area of 29.411 ha for which the Stage-II Forest Clearance is available.
Road Transportation	
1.	Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC.
2.	Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered with tarpaulin to prevent fugitive dust emission.
3.	The Project Proponent shall maintain the entire mineral transportation route by road at their own cost. The Project Proponent shall also periodically maintain the roads to reduce the fugitive emissions from roads and also the vehicular emissions.
4.	The Project Proponent shall convert the unpaved road into concrete road to reduce the fugitive dust.
5.	Regular sprinkling shall be done on roads to suppress the dust at the source.
STP	
1.	As committed by the Project Proponent, modular type STPs shall be installed in place of Septic Tanks by March, 2024 with a provision to use the treated sewage for plantation.
Validity	
1.	This amendment in EC will be valid for a period of a 2 (two) years only w.e.f 23.01.2024.

Density of Plantation	
1.	To increase the density of trees, the Project Proponent needs to undertake the plantation in low density areas within the mine lease area.
Solar Fencing	
1.	The Project Proponent should follow-up the matter regarding solar powered electric fencing with DFO, Saranda to reach at a decision thereof.
Single Use Plastic	
1.	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
Regrassing	
1.	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
Miscellaneous	
1.	All other terms and conditions mentioned in the EC letter dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022 shall remain unchanged.
Road Transportation	
1.	The Project Proponent shall undertake the dense plantation all along the haul roads and approach roads to attenuate the fugitive dust.

3.6. Agenda Item No 6:

3.6.1. Details of the proposal

Amendment in Environmental Clearance for Changes in Operation of Rowghat Iron Ore Project of SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai) under Para 7(ii) of EIA Notification 2006. by STEEL AUTHORITY OF INDIA LTD located at KANKER, CHHATTISGARH			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/CG/MIN/439531/2023	J-11015/331/2006-IA.II(M)	10/10/2023	Mining of minerals (1(a))

3.6.2. Project Salient Features

1.	The instant proposal is for amendment in EC dated 04.06.2009 for Changes in Operation of Rowghat Iron Ore

Project of M/s SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai), located in Matla Reserve Forests, Narainpur and Kanker District, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.

ii. Details of previous Environmental Clearance (EC):

Date of application	Proposal No	Consideration	Details	Date of accord
28.07.2007	IA/CG/MIN/8566/2009	-	Production of 14.0 MTPA of iron ore mining over a lease area of 883.22ha	04.06.2009
23.06.2009	-	-	Partial modification in EC letter dated 04.06.2009 and additional specific conditions were imposed	15.03.2010
09.02.2017	IA/CG/MIN/8566/2009	February 20- 21, 2017	Transportation of 0.3 million TPA of ore from Rowghat M.L to Keonti by road and further onwards to Dalli Rajhara/Bhilai through rail till 2021	08.06.2017
01.11.2021	IA/CG/MIN/236647/2021	30 th Nov - 3 rd Dec, 2021	Extension of validity of amendment in Environmental Clearance granted on 08.06.2017 for Rowghat Iron Ore mine Deposit F [ML area 2028.797ha and production capacity 14 million TPA] for transportation of 0.3 MTPA of iron ore from Rowghat ML to Keonti rail head by road and further onwards to Dalli Rajhara/Bhilai by rail located in Matla Reserve Forests, in Narainpur and Kanker District, Chhattisgarh for a period of another two (2) years i.e., till 31.12.2023	25.01.2022

iii. Now, the Project Proponent has requested for amendment in EC dated 04.06.2009 for Changes in Operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai) as mentioned below:

S. No	Reference	Description	Existing	Amendment sought	Reason for amendment
1	Para 2 of Original EC 04.06.2009	Change in Process	14 MTPA Crushed Ore Disptached	2 MTPA Crushed and Screened Ore transport through Road from Hill Top from existing 0.3 MTPA	Downhill conveyor not installed due to non handing

			to downhill through 12 KM Conveyor length		over of land by forest department
2	Para 2 of Original EC	Change in Process	14 MTPA Screening Ore transport through Rail from Rowghat Siding located at Foot Hill to Bhilai Steel Plant	Total 2 MTPA Screened Material transport through Road Length 235 KM maximum upto Antagarh or Bhanuprtappur Siding till Dec'26 from existing 0.3 MTPA upto Dec'23)	Railway siding not commissioned due to hindrances caused due to Left wing extremism Consequently delay in handing over of land by GoCG
3	Para 14 of Amended EC dated 25.01.2022	Amendment in Quantity and extension of time	0.3 MTPA transport through Road upto Keonti Siding validity upto Dec'23	Request for allowing dispatch through road @ 2.0 MTPA till Dec., '26 which includes: 1. @ 0.8 MTPA of iron ore up to Antagarh Railway Siding via Tadoki (direct route) 2. 1.2 MTPA up to Bhanupratappur/ Antagarh Railway Siding via Narainpur & Kanker (long route) and subsequently by rail to Bhilai. 3. In case of law and order problem along the Rowghat Mine to Antagarh Siding (direct route) as is often the case, the entire ore will be trucked to Bhanupratappur/Antagarh Siding via Narainpur & Kanker.	Railway Siding Commissioned only upto Antagarh Siding. Expected to reach Rowghat by Dec'25 and development of associated infrastructure by Dec'26

iv. The Project Proponent has submitted the mine lease deed was executed on 21.10.2009 and is valid for a period of 20 years. The entire lease area of 2028.797 ha is a Forest Land. Stage-II Forest Clearance was obtained vide letter no. F.No.8-44/2005-FC (Pt), dated 3rd Aug., 2009 for diversion of 883.22 ha of forest land.

v. The Project Proponent has submitted that the Rowghat Mine commenced mining operations only in late Feb., 2022. Prevailing micro-meteorological conditions, ambient air quality (14 locations), noise levels (14 locations) and water quality (Groundwater: 5 locations and Surface water: 5 locations), soil quality (6 locations) were assessed by carrying baseline environmental data generation for one month during May, 2023 (Summer Season). Traffic density on the proposed ore evacuation route was also studied.

vi. The Project Proponent has submitted the certified compliance report issued by the Sub Office, MoEF&CC vide letter dated 10.10.2023 for the EC's dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022. The site visit was conducted on 18.09.2023. Then, the Project Proponent has submitted the action taken report on 16.10.2023 to the Regional Office, MoEF&CC. The Ministry vide letter dated 02.11.2023 requested the Regional Office, Nagpur to submit the review report of the ATR submitted by Project Proponent. Then, the Project Proponent vide email dated 13.11.2023 submitted the revised and updated action taken report.

3.6.3. Deliberations by the committee in previous meetings

N/A

3.6.4. Deliberations by the EAC in current meetings

The Project Proponent has informed the EAC that the instant proposal is for amendment in EC dated 04.06.2009 for changes in operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant for dispatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai. Initially, Environmental Clearance (EC) was obtained on 04.06.2009 for production of 14.0 MTPA of Iron ore. The ore is dispatched by rail to SAIL's Bhilai Steel Plant located at a distance of 185 km from the mine lease area. There has been delay in commissioning of rail link to Rowghat due to Left wing extremism activities and obtaining forest clearance. In this regard, amendment in EC dated 04.06.2009 has been sought to allow dispatch through road @ 2.0 MTPA till Dec., 2026 from the existing capacity of 0.3 MTPA by road. About 81% of the rail works has been completed upto Tadoki (77km) and the remaining work up to Rowghat will be completed by June, 2025 and it is expected to commission the Rowghat Station by Dec 2025 and associated linking infrastructure by Dec, 2026. The Bhilai Steel Plant is the sole producer and supplier for strategically important products to Indian Railways. The Bhilai Steel Plant is completely dependent on Rowghat Iron Ore mine and this project is an importance of national interest. The EAC noted the public complaints were received against the project and also in support of the project to increase their production capacity.

Then, the Project Proponent has presented the KML file and shown the boundary of the Rowghat mine lease area and informed the EAC that the entire mine lease area of 2028.797 ha is a Forest Land. Presently mining activity is being carried out in Anjarel block. The present proposal is to transport the ore of 0.8 MTPA from Rowghat to Antagarh Railway siding (~58km by road) via Tadoki (direct route) and 1.2 MTPA ore to Antagarh / Bhanupratappur Railway Siding (232 km/200km by road) via Narainpur & Kanker (long route). Due to law and order issue, the State Govt. has suggested to take the longer route via Narainpur & Kanker to reach Antagarh / Bhanupratappur Railway Siding. If the law and order issue exists via Tadoki route, the entire material will be transported through longer route as suggested by the State Govt. The Project Proponent also informed the EAC that the own RCC road of 7.5m width has been developed by the Project Proponent with an estimated budget of Rs 35 Cr from the foot hill of Rowghat to SH-5. Further, the Project Proponent has shown the photographs of the road developed by M/s SAIL, SH 5 between Tadoki & Antagarh, Road linking SH-5 with Antagarh Siding, Kondagaon bypass road, Kanker bypass road and SH 6 between Kanker & Bhanupratappur. Project Proponent also shown the photographs of Antagarh and Bhanupratappur Railway sidings and also the progress of the rail link.

The Project Proponent informed the EAC that the project is well equipped to produce 2.0 MTPA. Transportation will be outsourced and local people will be involved in transportation. The EIA Consultant has informed the EAC that the baseline data was generated during May, 2023. The ambient air quality stations (14 locations) were monitored in the mine lease and all along the transportation route. Noise levels at 14 locations were within the norms prescribed by CPCB. Surface water quality has been monitored at 5 locations and found to be suitable for drinking after conventional treatment and disinfection. Traffic density was studied on the transport route at 9 locations at hourly intervals. Additional load on the road will not have impact and the resultant concentration of PM₁₀ due to transportation will be ~91.14 $\mu\text{g}/\text{m}^3$, PM_{2.5}: ~47.1 $\mu\text{g}/\text{m}^3$, SO₂: 15.8 $\mu\text{g}/\text{m}^3$ and NO_x: 25.26 $\mu\text{g}/\text{m}^3$. The Project Proponent also detailed about the CSR activities being taken up. The Project Proponent has shown the certified past production details dated 06.07.2023 from the year 2020-21 to 2022-23. The Project Proponent has submitted the certified compliance report issued by the Sub Office, MoEF&CC vide letter dated 10.10.2023 for the EC's dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022. The site visit was conducted on 18.09.2023. Then, the Project Proponent has submitted the action taken report on 16.10.2023 to the Regional Office, MoEF&CC.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the dispatch of 2.0 MTPA (Maximum) of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai will be allowed in two phases for a period of two years i.e., 1.5 MTPA for a period of 6 months w.e.f 01.01.2024 to 30.06.2024 and 2.0 MTPA (1.5 MTPA + 0.5 MTPA) for a period of 18 months w.e.f 01.07.2024 to 31.12.2025 considering the pollution load due to transportation by road. The EAC also opined that meanwhile, the Project Proponent shall speed up the progress of the rail link. Based on the discussions held, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and its subsequent amendments therein; **recommended** the proposal for amendment in EC dated 04.06.2009 for dispatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to M/s SAIL's Bhilai Steel Plant from Rowghat Iron Ore Project [MLA:2028.797 ha] of M/s SAIL, located in Matla Reserve Forests, Narainpur and Kanker District, Chhattisgarh along with the following additional specific conditions mentioned below: -

3.6.5. Recommendation of EAC

Recommended

3.6.6. Details of Environment Conditions

3.6.6.1. Specific

Air Quality Data	
1.	The real time data generated by continuous ambient air quality monitoring stations (CAAQMS) should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
Gap Plantation	
1.	The Project Proponent shall undertake the gap plantation and shall plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting.
Mining activity	
1.	Mining activity is restricted to an area of 883.22 ha for which the Stage-II Forest Clearance is available.
Miscellaneous	
1.	All other terms and conditions mentioned in the EC letter dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022 shall remain unchanged.
Production	
1.	The dispatch of 2.0 MTPA (Maximum) of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai is allowed in two phases for a period of two years i.e., 1.5 MTPA for a period of 6 months w.e.f 01.01.2024 to 30.06.2024 and 2.0 MTPA (1.5 MTPA + 0.5 MTPA) for a period of 18 months w.e.f 01.07.2024 to 31.12.2025. Accordingly, State Pollution Control Board shall grant the Consent to Operate (CTO).
Progress of rail link	
1.	The Project Proponent shall speed up the progress of the rail link and monthly progress/status along with the photographs shall be submitted to the Regional Office of MoEF&CC.
Road Transportation	
1.	The Project Proponent shall undertake the dense plantation all along the haul roads and approach roads to attenuate the fugitive dust.
2.	Fugitive dust monitoring shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC.
3.	The Project Proponent shall maintain the entire mineral transportation route by road at their own cost. The Project Proponent shall also periodically maintain the roads to reduce the fugitive emissions from roads and also the vehicular emissions.

4.	The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine. The wheel washing facility shall be integrated with complete recirculation system.
5.	Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered to prevent fugitive dust emission.
6.	The Project Proponent shall ensure that the additional traffic on the road in no way shall be hindrance to the public. Traffic marshal shall be deployed to ensure the safe movement of transportation.

Single Use Plastic

1.	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

Validity

1.	This amendment in EC will be valid for a period of a 2 (two) years only w.e.f 01.01.2024.

Water management structures

1.	Periodical maintenance of surface water management structures has to be carried out to prevent and control the water pollution and soil erosion. The Project Proponent shall take adequate measures to prevent the washout of fines during monsoon season.

Clean Energy

1.	

Regrassing

1.	

Road Transportation

1.	Regular sprinkling shall be done on roads to suppress the dust at the source.

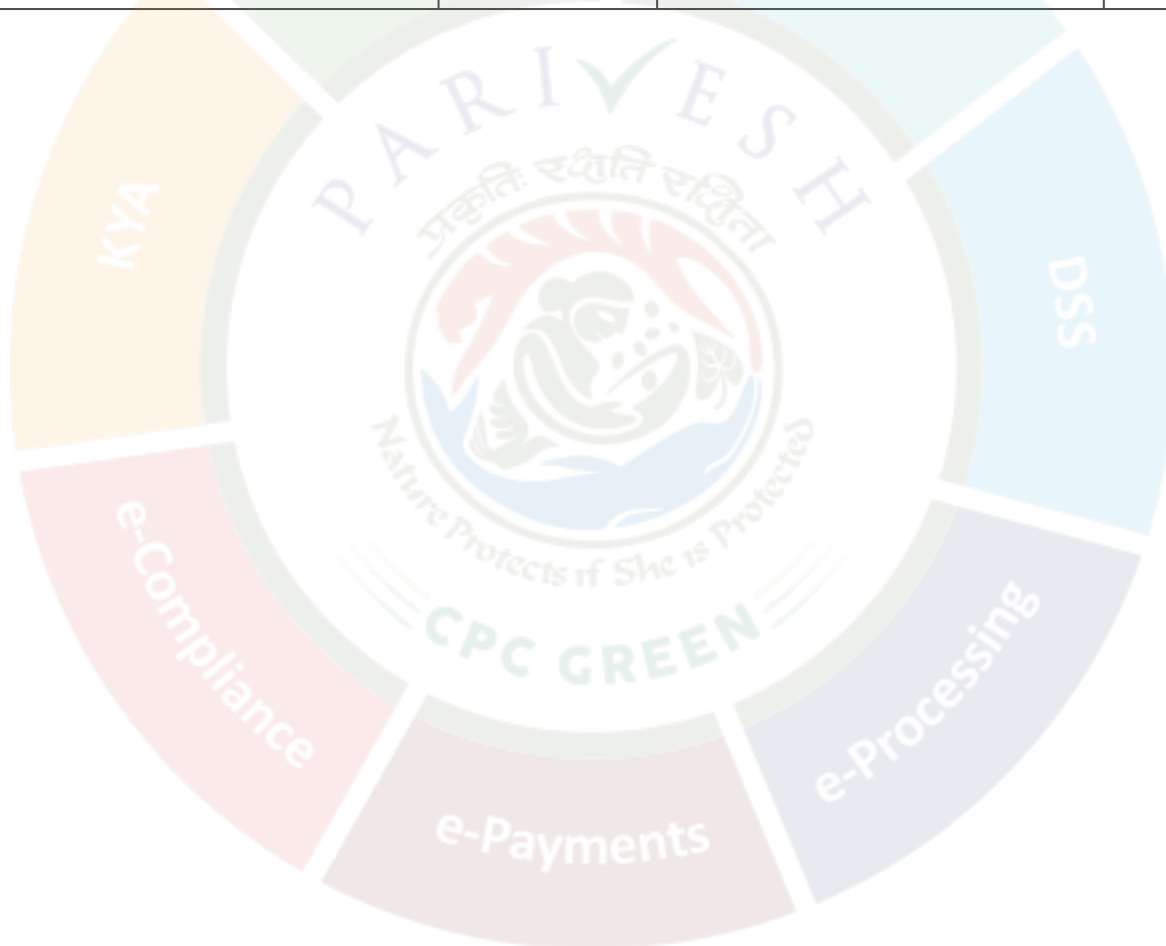
4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Mr Pankaj Verma	Scientist E	pan*****@nic.in	
2	Dr Dinesh Misra	IFS (Retired)	dmi*****@gmail.com	
3	Sh Niranjana Kumar Vasu	Member (EAC)	vas*****@gmail.com	
4	Dr Asha Rajvanshi	Member (EAC)	ash*****@gmail.com	Absent
5	Shri Avijit Gosh	Member (EAC)	avi*****@gmail.com	

6	Shri Bandi Ramchandra Reddy	Member (EAC)	red*****@gmail.com	Absent
7	Prof Pramod Kumar	Member (EAC)	nit*****@yahoo.com	Absent
8	Prof Devesh Walia	Member (EAC)	dev*****@gmail.com	
9	Dr Suresh Tiwari	Member (EAC)	smb*****@gmail.com	Absent
10	Dr K G Asha Manjari	Member (EAC)	kim*****@gmail.com	
11	Prof Dev Dutt Sharma	Member (EAC)	dds***@gmail.com	Absent
12	Shri Mohammad Niyazi	Member (EAC)	dir*****@gmail.com	Absent
13	Mr V K Soni Representative of IMD	Member (EAC)	vij*****@imd.gov.in	Absent
14	Dr Y G Kale Representative of IBM	Member (EAC)	ygk***@ibm.gov.in	



Minutes of 22nd EAC (Non-Coal Mining) meeting held during 14-15 November, 2023

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR**

SUMMARY RECORD OF 22ND MEETING OF THE COMMITTEE OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 22nd meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 14-15 November, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 21st EAC (Non-Coal Mining) meeting held during 18-20 October, 2023:

The minutes of the 21st EAC meeting held during 18-20 October, 2023 were placed before the members of the EAC.

Day 1: 14th November, 2023 (Tuesday)

1.1 Amendment in EC dated 17th July, 2018 w.r.t Condition No 22 for Guda Clay mine of M/s Harish Clays with enhancement of production capacity from 60,000 TPA to 2,50,000 TPA (ROM) of Clay in the mine lease area of 284.20 ha, located at Village-Guda, Tehsil Kolayat, District Bikaner, Rajasthan - [File No: J11015/163/2014-IA.II(M), Proposal No: IA/RJ/MIN/125957/2014, Consultant: M/s. Enviro Green Consultants (I) Pvt. Ltd] - Amendment in EC

The instant proposal is for amendment in EC dated 17th July, 2018 w.r.t Condition No 22 for Guda Clay mine of M/s Harish Clays with enhancement of production capacity from 60,000 TPA to 2,50,000 TPA (ROM) of Clay in the mine lease area of 284.20 ha, located at Village-Guda, Tehsil Kolayat, District Bikaner, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. Initially, the Project Proponent has obtained Environmental Clearance (EC) vide EC letter dated 18.02.1998 for the production capacity of 60,000 TPA of clay.

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- ii. Then, the Project Proponent obtained Environmental Clearance (EC) vide EC letter dated 17.07.2018 for Guda Clay mine of M/s Harish Clays with enhancement of production capacity from 60,000 TPA to 2,50,000 TPA (ROM) of Clay in the mine lease area of 284.20 ha.
- iii. Now, the Project Proponent requested for amendment in EC w.r.t Condition No 22 which as mentioned below:

S. No	As per EC letter dated 17.07.2018	Request for amendment in EC by the Project Proponent
1	22) <i>The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office on six monthly basis."</i>	i. The Project Proponent submitted that the existing dump height is 38 meters which will reach approximately 60 meters. It would not be economical or feasible to maintain a height of 8 m as it will require a significant part of the lease area which will also cover the major part of mineralized zone and will degrade the surrounding environment to a greater extent. Hence the <i>dump height should be permitted to 60 meter instead of 8 meter.</i> ii. In line with point no. 7 of EC, Change is sought in point 22 from "the entire excavated area shall be backfilled and afforested", to <i>"at the conceptual stage, out of 271 Ha of excavated pit, 100 ha will be converted in to rain water collection pond and remaining 171 ha will be back filled and ecologically restored by plantation which is similar to the conceptual planning given in the EMP report and approved Mining Plan"</i>.

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- iv. The proposal was earlier considered in the 18thEAC (Non-coal Mining) held during 22-24 June, 2020 and after detailed deliberations, the Committee was of the view the study for slope study has already been conducted by CMPDI but to execute the same the PP is required to submit the modified mining plan. The Committee appreciate the effort of PP made towards backfilling and was of the view that while preparing the modified mining plan it should be kept in the mind the to the extent possible the backfilling is to be done and only in case where it is not feasible the dumping of the same in dump yard to be done. Therefore, PP shall submit a draft mining plan in the similar lines, so that, height of the dump, area of dump, area to be backfilled, time line for backfilling etc. may be appraised before consideration of amendment in EC. Therefore, EAC deferred the proposal. Then, the Project Proponent submitted the information on 12.01.2023 in Parivesh Portal and accordingly the proposal was considered in the EAC meeting held on 8thFebruary, 2023. After detailed deliberations, the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 21.10.2023 and accordingly the proposal was again reconsidered in the EAC (Non-Coal Mining) meeting held during 14-15 November, 2023.

Based on observation of EAC in its EAC meeting held during 8th February, 2023 and compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held on 8 th February, 2023	Reply by Project Proponent					
1	The Project Proponent needs to address the environmental impacts due to increase in dump height from 8m to 60m.	The Project Proponent has submitted the anticipated environmental impacts due to the increase in dump height and their protective measures as mentioned below: <table><tr><th>Anticipated Impact</th><th>Mitigation measures</th></tr><tr><td>Sliding of waste dumps may cause loss of life as well as undue land degradation.</td><td>A study has been carried out by CMPDI, Ranchi for the stability of dump. As per the recommendations made in the study, the geometry of the dump is proposed to maintain the height of 10 m and width of 10 m with a slope angle of 45° for each individual bench and up to 60 m height, making 6 benches with an overall slope angle of 29°, and pp assure to maintain the</td></tr></table>		Anticipated Impact	Mitigation measures	Sliding of waste dumps may cause loss of life as well as undue land degradation.	A study has been carried out by CMPDI, Ranchi for the stability of dump. As per the recommendations made in the study, the geometry of the dump is proposed to maintain the height of 10 m and width of 10 m with a slope angle of 45° for each individual bench and up to 60 m height, making 6 benches with an overall slope angle of 29°, and pp assure to maintain the
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			same. Any depressed land nearby the toe of the dump or top, if seen, will be filled up with OB material and dozed or levelled so that no accumulation of water takes place. If any deformation in the slope geometry of the dump is observed, it will be monitored with the help of the survey department for further movement. The spill of the overburden will be checked by making a retaining wall at the toe of the overburden dump to check for undue land degradation as well as loss of life.
		The impact of runoff from the over burden and other stockpiles on water bodies (siltation, contamination etc.).	Garland drain (1m x 1.5m) will be constructed around the OB dump to channelize the rain water to a settling pond of (5.0m x 5.0m x 0.1 m). Proper drainage measures are being taken. No water stagnation on the top of the overburden is allowed. The top of the overburden dump will be graded in such a manner that no water will accumulate there, and cleaning of the drain and settling pond will be done every year in the premonsoon season to maintain the efficiency of the sediment control.

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		Degradation of land and loss of aesthetic value of the land	Both the backfilled and dumping sites will be reclaimed by growing local grasses, trees, and bushes. This will improve the aesthetic value of the area
2	The Project Proponent needs to carry out detailed study on stability of pit slope.	The Project Proponent has submitted that the Scientific Study on Stability of Pit Slopes at Guda Clay mine has been carried out by CSIR-Central Institute of Mining & Fuel Research. CSIR-CIMFR Team has done a detailed field investigation in and around the current Pit No.1 & 2 (Central Quarry) to examine the current stability scenario of its benches which involved the collection of geological and geotechnical data related to the rock masses. The conclusion and suggestions of the scientific study are as follows:- To minimize the risk associated with slope failure, the stability of the inter-ramp and overall pit slope is considered to be the most important factor for an open-cast mining operation. The analyzed stability condition of the inter-ramp of Pit No. 1 & 2 (Central Quarry) as well as the overall slopes of Guda clay mines through numerical methods suggest quite a stable condition for pit benches as well as overall mine slopes. The field investigation suggests differential weathering of variable grades of different lithological units which varied within the inter-ramp of Pit No. 1 & 2 (Central Quarry) locations. Field-based rock mass characterization of slope materials recommends poor rock mass conditions due to intense weathering, tectonically sheared and low-strength materials. The overall stability of the mine slope is quantified by the FOS which varied from 3.59 to 1.17 for five considered cross-sections along the mine from west to east. The lowest FOS of 1.17 is observed for the uppermost pit benches of the E1-E2 section which are composed of weathered sandstone	

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		and clay overlain by alluvium. The stability analysis was performed in static and dry conditions. So, the inclusion of rainfall conditions may reduce the FOS by some magnitude due to the susceptibility of clay to swell in water. Therefore, is suggested to take care of proper surface drainage on the inter-ramp as well as the slope crest area to minimize the water infiltration into the slope mass. It reduces the build-up of the pore water pressure within the clay and weathered rock mass and thereby lessens the chance of failure.
3	The Project Proponent needs to submit the approved modified scheme of mining w.r.t amendment sought.	The Project Proponent has submitted the Mining Scheme with Progressive Mine Closure Plan was approved by the Office of Superintending Mining Engineer, Mines & Geology Department vide Lr.No. SME/Bikaner-CIR/Mine-Scheme/Bikaner/ F-489/23/6224 dated 23.08.2023. In mining scheme, it has been mentioned that as per recommendation of CMPDI, the geometry of dump is proposed to maintain the height of benches 10m and width 10m with slope angle 45° of individual bench and up to 60 m height making 6 benches overall slope 29°. The Project Proponent has informed that they are in the process to modify the existing dump in a modified way to have dump geometry with 42° to 45° individuals. It is also mentioned that it has been conceptualized that 271.00 ha will be converted in to mining pit at end of the life of the mine and out of this, about 100.00 ha area would be left for rain water storage so that nearby villagers may use for various purposes as well as to serve as artificial recharge to increase the water table and 171.00 ha area would be backfilled and rehabilitate by growing trees and bushes.
4	The Project Proponent needs to submit the Certified Compliance Report to be issued by the Ministry's	The Project Proponent has submitted the certified compliance report issued by the Regional Office (RO), Gandhinagar vide Lr.No: IV/Env/Raj/MINE-578/992/2019 dated

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	Integrated Regional Office.	11.07.2023. The site visit was conducted by RO on 13.04.2023.

- v. Details of Mine Lease:
 - a) The total mine lease area is 284.20 ha, out of which Private land is 90.0 Ha and Govt. land is 194.20 ha.
 - b) The Project Proponent has submitted that the State Govt. vide Lr no. ME/Bika/ML/7/ 93/5181 dated 16.02.2015 have extended the validity of the mine lease period for a period of 50 years i.e., upto 04.08.2048. The rider agreement for the extension of the lease period and change in major to minor mineral of clay has been made on 16.02.2016.
- vi. The Project Proponent has submitted that the Consent to Operate (CTO) issued by the Rajasthan State Pollution Control Board vide Order No: 2021-2022/Mines/10390 dated 18.01.2022 for production of Clay of 2,50,000 tonnes / annum for the period from 01/02/2022 to 31/01/2027.
- vii. The Project Proponent has submitted the certified production details from the Department of Mines & Geology vide letter dated 16.01.2020 for the period 05.08.1998 - 04.08.1999 to 01.04.2018 - 31.03.2019, vide letter dated 13.01.2021 for the period 2019-20 to 2020-21 (April 2020 – December 2020) and vide letter dated 01.02.2023 for the period 2020-21 to 2022-23 (April 2022 - December 2022). The Project Proponent has submitted an undertaking in a non-judicial stamp paper of Rs 100 bearing no: AL 668434 dated 13.06.2020 stating that no violation made in the project under the provisions of the EIA Notification dated 14.09.2006 and as per Ministry's OM dated 14.03.2017 and there is no penalty imposed by the Dept. of Mines and Geology, Govt of Rajasthan.
- viii. The Project Proponent has submitted an undertaking vide letter dated 30.01.2023 stating that there is no any litigation/court case pending against the project.

3. Observation and Recommendation of the EAC: -

The EAC noted that the instant proposal is considered in the EAC as per Ministry's OM dated 27.09.2022 which states that *"the proposals which have been considered/ appraised once by EAC either for TOR or EC, but final decision has not been taken, shall continue to be appraised at the Central level only, till final disposal for ToR/EC, even after the amendments in the EIA Notification are issued from to time regarding delegation of projects to SEIAAs"*. The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The Project Proponent has shown the mine lease boundary of 284.20 ha, existing waste dump and boundary plantation. Then, the EAC deliberated on the additional details submitted by the Project Proponent and the Consultant.

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The EAC asked about the nature of the topsoil. The Project Proponent has informed the EAC that the nature of the topsoil is alluvium and thickness of the topsoil varies from 20cm to 1m. The EAC also asked about the backfilling. The Project Proponent has informed the EAC that the considering the safety, part of the material is backfilled and partly dumped. The lateral expansion of dump has also been done to a height of 8m. Garland drain (1m x 1.5m) will be constructed around the OB dump to channelize the rain water to a settling pond of (5.0m x 5.0m x 0.1 m). The Project Proponent has also informed the EAC that the Scientific Study on Stability of Pit Slopes at Guda Clay mine has been carried out by CSIR-Central Institute of Mining & Fuel Research. The CSIR-CIMFR Team has done a detailed field investigation in and around the current Pit No.1 & 2 (Central Quarry) to examine the current stability scenario of its benches. As per the recommendations made in the study, the geometry of the dump is proposed to maintain the height of 10 m and width of 10 m with a slope angle of 45° for each individual bench and up to 60 m height, making 6 benches with an overall slope angle of 29°. The EAC opined that the Project Proponent needs to ensure that the overall slope angle of 29°.

Further, the Project Proponent has informed the EAC that the Mining Scheme with Progressive Mine Closure Plan was approved by the Office of Superintending Mining Engineer, Mines & Geology Department vide letter dated 23.08.2023. The Project Proponent also informed the EAC that the certified compliance report was issued by the Regional Office (RO), Gandhinagar vide dated 11.07.2023. The Project Proponent has also shown the photographs of the existing waste dump, backfilled area and safety barrier. The EAC noted that the existing waste dump of 38m is inactive and asked the Project Proponent to stabilize the waste dump to prevent soil erosion.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC agreed only for increase in dump height of lateral expansion of dump from 8m to 30m. The EAC opined that further increase in dump height i.e., beyond 30m shall be reviewed by the concerned authority w.r.t stabilization of waste dump. The EAC was not convinced with the proposal for partly backfilling and converting the pit into water reservoir. The EAC also opined that the Project Proponent needs to have proper backfilling from the view point of mineral conservation. Based on the discussions held, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for amendment in EC dated 17th July, 2018 for Guda Clay mine [2,50,000 TPA(ROM)] of M/s Harish Clays only for an increase in dump height of lateral expansion of dump from 8m to 30m in the mine lease area of 284.20 ha, located at Village-Guda, Tehsil Kolayat, District Bikaner, Rajasthan along with following additional special conditions:-

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- i. The Project Proponent needs to properly stabilize through plantation the existing dump height of 38m. Plantation program over inactive dump needs to be scientifically planned.
- ii. For further increase in dump height beyond 30m, the Project Proponent shall approach the concerned authority only after proper stabilization of later expansion of dump and existing dump and also with the action plan for backfilling.
- iii. The Project Proponent needs to implement the recommendations of the Scientific Study on Stability of Pit Slopes carried out by CSIR-Central Institute of Mining & Fuel Research.
- iv. The Project Proponent needs to ensure that the overall slope angle shall be 29°.
- v. The Project Proponent needs to make provision for permanent water sprinklers instead of water tankers.
- vi. The catch drains and siltation ponds needs to be regularly maintained to arrest silt and sediments flow from dumps.
- vii. Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Regional Office of MoEF&CC.
- viii. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- ix. All other terms and conditions mentioned in the EC letter dated 17th July, 2018 remains unchanged.

1.2 Proposal for Regularization of Environmental Clearance under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for Terms of Reference of Roha-Kotada-Nandra-Jarjok Bauxite Mining of M/s Gujarat Mineral Development Corporation Limited with Production Capacity 1,00,000 TPA in the mine lease area of 360.3601 ha, located at Village Roha, Kotada, Nana Nandra, MotaNandra&Jarjok, Tehsil Abdasa&Naktarna, District Kutch, Gujarat– [File No. J-

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11015/149/2018- IA-II(M); Proposal No. IA/GJ/MIN/258092/2022] - Terms of Reference

The instant proposal is for Terms of Reference under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for mining of Limestone in Roha-Kotada-Nandra-Jarjok Bauxite Mining project of M/s Gujarat Mineral Development Corporation Limited with Production Capacity of 1,00,000 TPA in the mine lease area of 360.3601 ha, located at Village Roha, Kotada, Nana Nandra, Mota Nandra & Jarjok, Tehsil Abdasa & Naktarna, District Kutch, Gujarat.

2. Observation and Recommendation of the EAC: -

The EAC noted that the Project Proponent vide email dated 30.10.2023 informed that the Terms of Reference (ToR) have been already granted on 18.04. 2022. Hence, the EAC **returned** the proposal.

1.3 Proposal for Regularization of Environmental Clearance under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for Terms of Reference of Mothala Balachod Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Limited with Production Capacity of 42,000 TPA in the mine lease area of 280.7686 ha, located at Village: Balachod, Mothala & Khandai, Tehsil Abdasa, District Kutch, Gujarat– [File No. J-11015/150/2018- IA-II(M); Proposal No. IA/GJ/MIN/258052/2022] - Terms of Reference

The instant proposal is for Terms of Reference under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for mining of Limestone in Mothala Balachod Bauxite Mining Project of M/s Gujarat Mineral Development Corporation Limited with Production Capacity of 42,000 TPA in the mine lease area of 280.7686 ha, located at Village: Balachod, Mothala & Khandai, Tehsil Abdasa, District Kutch, Gujarat.

2. Observation and Recommendation of the EAC: -

The EAC noted that the Project Proponent vide email dated 30.10.2023 informed that the Terms of Reference (ToR) have been already granted on 18.04.2022. Hence, the EAC **returned** the proposal.

1.4 Proposed Limestone Mine “Mudhvay Sub Block A” of M/s. JK Lakshmi Cement Ltd. with Limestone production capacity of 2.50 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) in the mine lease area of 198.90.98 ha, located at Village: Mundhvay, Taluka: Lakhpat, District: Kachchh, Gujarat – [F.No: :IA-J-11015/32/2023-IA.II(NCM); Proposal No: IA/GJ/MIN/445723/2023; EIA Consultant: M/s J.M. EnviroNet Pvt. Ltd] – Terms of Reference (ToR)

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The instant proposal is for grant of Terms of Reference (ToR) for mining of Limestone in “Mudhvay Sub Block A” of M/s. JK Lakshmi Cement Ltd. with Limestone production capacity of 2.50 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) in the mine lease area of 198.90.98 ha, located at Village: Mundhvay, Taluka: Lakhpat, District: Kachchh, Gujarat.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. General condition is applicable for the project due to presence of Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary located at a distance of 3.6 km and from the boundary of Narayan Sarovar Wildlife Sanctuary at an aerial distance of 4.0 km from lease boundary and hence the proposal falls under Category “A” and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 23°42'57.58" to 23°44'09.26" N and Longitude: 68°40'31.47" to 68°41'12.38" E. The mine lease area falls under the Survey of India Toposheet No: 41A/10 and falls in Seismic Zone-V.

iii. Details of Mine Lease:

S. No	Letter of Intent (LoI) and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease vide Lr.No.: MMR- 102020-MM-496-CHH	06.08.2021	Limestone (Major mineral)	3 years	Govt. of Gujarat	198.90.98

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	58.63 ha
Government waste land	138.51 ha
Pond land	1.76 ha
Forest Land	-
Total Mining lease area (MLA), Ha	198.90.98 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Mining plan details:

Mining Plan along with Progressive Mine Closure Plan	Letter No.	MCDR- MPCP 0 CaF1/50/2022- GNR- IBM_RO_GNR

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was approved by Indian Bureau of Mines (IBM)	Date	16.01.2023
	Mineral & (Major/Minor)	Limestone (Major mineral)
	Mine Lease Area, Ha	198.90.98 ha
	Validity	5 years from the date of Mining Lease registration
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Excavation will be done by mechanized opencast method using Surface Miner with combination of excavator-tippers combination. Surface Miner is eco-friendly machine as it suppresses dust emission. No drilling and blasting carried out during excavation of limestone	
Geological Reserves	263.75 Million TPA (As on 01/10/2022)	
Mineable Reserves	227.14 Million TPA (As on 01/10/2022)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 4.8 Million TPA <u>Breakup of Total Excavation:</u> 1. Limestone: 2.5 Million TPA 2. Top Soil: 0.22 Million TPA 3. Over Burden: 2.08 Million TPA	
Life of mine	95 years (Expected by 01.10.2022)	
Mine Bench Height & Bench Width	Bench height: 6.0 m (Minimum) Bench Width: 20 m (Maximum)	
No. of Mine Benches	16 benches at conceptual stage	
Existing Depth, m bgl	It's a greenfield project and so not applicable.	
Ultimate Depth of Mining, m bgl	-89 m RL (112 m bgl)	
Ground Water Table, m bgl	6 m bgl	
Details of ground water intersection	Water table will be intersected during the plan period and necessary permission will be taken before intersecting ground water table.	
Individual bench slope	70°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	Nil	
Mineral Beneficiation	Nil	
RoM output size	Nil	
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by dumpers via haul road and it will be transported to end users via Road.	
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ Total 0.22 million tonnes of top soil will be generated during plan period which will be used in green belt generation. At the conceptual stage top soil generated will be used for Greenbelt and	

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	plantation. <u>Over Burden:</u> ➤ During this Plan period, 6.46 Million Tonnes Over burden will be generated which will be dumped over an area of 24.51 ha. ➤ Approx 103.73 million tonnes of overburden will be generated during conceptual stage. Management: At the conceptual stage, OB generated will be used for backfilling of 70.87 ha excavated area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	305 KLD	Fresh Water	305 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump as and when developed Permission will be taken from State Govt. for using Ground water.		
Permission for withdrawal/ intersection along with details of grant and its validity	Working depth during the plan period will be -19 m RL (42 m bgl) and at conceptual stage, ultimate working depth will be - 89 m RL (112 m bgl). Depth of water table in the area is 6 m bgl. Water table will be intersected during the plan period and necessary permission will be taken before intersecting ground water table.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Nathura Dada	~250 m in West direction
Nearest Town	Bhuj	~111 km in SE direction
Nearest State/National Highway	SH-6	~1.5 km in WNW direction
Interstate Boundary	None	None
Railway Station/Railway line	Bhuj Railway Station	~113 km in SE direction
Water Bodies	Nathuwara Talav	Within the ML area
	Kapurarsi Nadi	~ 3.5 km in West direction
	Sangdiawala Talav	~ 4.5 km in south direction
	Korai Creek	~ 4.5 km in West direction
Forest	Mudhvay Reserved Forest	~ 0.75 km in SE direction
	Naredi Reserve Forest	~ 3.5 km in South direction

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	Kaiyari Reserved Forest	~ 3.0 km in SW & ~ 5.5 km in SW direction
	Godhatad Reserved Forest	~6.5 km in SW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	The Project Proponent has submitted the letter obtained from the Forest and Environment Department, Government of Gujarat, Gandhinagar letter dated 23.06.2023 stating that proposed area is located North Side 4 km away from Narayan Sarovar Wildlife sanctuary and 3.6 km away from Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary.
Wildlife Sanctuary	Yes	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	Yes	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study will be carried out, if schedule - I found in the study area Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for greenbelt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be 80.28 ha (4.60 ha area on 7.5 m lease periphery, 4.81 ha. on safety zone of Road and water pond & 70.87 ha. backfilled area).
Budget for green plant & plantation till the end of life of mine.	Rs 3.61 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	55
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	4.60 ha
50 m safety zone of nallah, roads, electric lines	4.81 ha

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500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement:

R & R details	i. Total mining lease area is 198.90.98 ha, out of which 58.63 ha is private land. ii. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 25.09.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BP 852442 dated 31.10.2023 stating that the company undertakes by affidavit that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 200 Crores
Employment	92 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The Project Proponent has shown the mine lease boundary over an area of 198.90.98 ha. The instant project attracts the general condition due to presence of Eco Sensitive zone of Narayan Sarovar Wildlife Sanctuary located at a distance of 3.6 km and from the boundary of Narayan Sarovar Wildlife Sanctuary at an aerial distance of 4.0 km from lease boundary. The Project Proponent has also shown the boundary of ESZ and Narayan Sarovar Wildlife Sanctuary from the mine lease area

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on the southern side. Further, the Project Proponent presented the letter obtained from the Forest and Environment Department, Government of Gujarat, Gandhinagar dated 23.06.2023 regarding the distance of ESZ and NarayanSarovar Wildlife Sanctuary from the mine lease area. The India-Pakistan International boundary is located at a distance of 27 km on northern side from the mine lease area. The Arabian Sea is located at a distance of about 30km on western side from the mine lease area. The Korai Creek is located at a distance of about 5.0 km, NW from the mine lease area. The instant proposal does not come under CRZ. The total mine lease area is 198.90.98 ha, out of which 138.51 ha is a Govt. land, 58.63 ha is a Pvt. land (Rain fed Agriculture land) and 1.76 ha is a Pond land. A cart track is passing through the mine lease area and will not be disturbed during entire life of the mine. A 50m safety zone on either side will be maintained along the cart track. There are also 2 ponds located within the mine lease area and the same will be maintained as non-mining zone during entire life of the mine. Dense plantation and bund formation will be undertaken to protect the pond. The EAC opined that the adequate safety measures have to be taken to protect the pond. Private Agricultural land will be purchased. There will be about 10-15 Project Affected Families. Detailed R&R survey is under process.

The EAC asked about the mineral transportation route. The Project Proponent has informed the EAC that the mined out mineral will be transported by road through NH on western side to the other cement plants and industries. The EAC asked about the proposed depth of mining and no. of mine benches. The Project Proponent has informed the EAC that the proposed depth of mining will be 112m bgl and 16 no. of mine benches will be created. The EAC opined that the pit slope stability study has to be carried out. The Project Proponent has informed the EAC pit slope stability study will be undertaken within 1st year plan period. The EAC also asked about the presence of Schedule - I species in the study area. The Project Proponent has informed the EAC that generally Chinkara, Monitor lizard, Great Indian Bustard, Leopard are found in the study area. A detailed survey will be undertaken and will be submitted in EIA/EMP report. The EAC asked about the Overburden dumping. The Project Proponent has informed the EAC that the OB will be dumped in the center part of the mine lease area. No backfilling has been proposed in the 1st five year plan period. The thickness of the Overburden is 5-6m. Height of the dump will be 30m. Topsoil will be maintained as a separate dump. Excavation will be done by mechanized opencast method using Surface Miner with combination of excavator-tippers combination. Water requirement will be 305.0 KLD. The EAC asked the Project Proponent to explore the possibility to reduce the water consumption. At conceptual stage, total area under mining will be 177.60 ha, out of which 70.87 ha will be backfilled and an area of 106.73 ha will be converted into water reservoir. The EAC asked the Project Proponent to revisit the proposed species for plantation. The EAC also suggested the Project Proponent to

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address the additional traffic load due to transportation and also to carry out cumulative impact assessment.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s. JK Lakshmi Cement Ltd. for “Mudhvay Sub Block A” with Limestone production capacity of 2.50 Million TPA, Top Soil: 0.22 Million TPA, Over Burden: 2.08 Million TPA (Total Excavation: 4.8 Million TPA) in the mine lease area of 198.90.98 ha, located at Village: Mundhvay, Taluka: Lakhpat, District: Kachchh, Gujarat for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- ii. Since the project is located in Seismic Zone –V, the Project Proponent needs to submit the risk and disaster management plan. The Project Proponent also needs to submit the past history of disasters occurred in the region.
- iii. The Project Proponent needs to undertake the scientific study on pit slope stability by the reputed Institute.
- iv. The Project Proponent needs to submit the safety measures proposed to protect the ponds within the mine lease area.
- v. The Project Proponent needs to submit the existing soil salinity data of the Mine lease area and in the Korai Creek.
- vi. The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.
- vii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
- viii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier

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Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

- ix. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.
- x. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- xi. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- xii. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity of the proposed mine, existing mines, cement plant and other operating mines including the transport scenario in the study area and also should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters and data used for each activity of the modeling also needs to be submitted at the time of appraisal of EC.
- xiii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiv. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.

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- xv. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored. The Project Proponent to revisit the proposed species for plantation.
- xvi. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xvii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xviii. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xix. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xx. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

1.5 Daba Saitthad Limestone Deposit of M/s Star Cement Ltd with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha, located at

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Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya – [F.No: IA-J-11015/39/2023-IA.II(NCM), Proposal No: IA/ML/MIN/449327/2023; EIA Consultant: M/s Perfact Enviro Solutions Pvt Ltd] – Terms of Reference (ToR)

The instant proposal is for Terms of Reference for mining of Limestone in Daba Saitthad Limestone Deposit of M/s Star Cement Ltd with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha, located at Daba Saitthad (Wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site and hence the proposal falls under Category “A” and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 25°09’24.78”N to 25°09’39.43”N and Longitude: 92°21’29.53”E to 92°21’56.03”E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 (Restricted) and falls in Seismic Zone-V.

iii. Details of Mine Lease:

S. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Prospecting License- MG.6/2023/33	01.03.2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.
2	Letter of Intent- MG.6/2023/277	28.08.2023	Limestone (Major)	3 years	Mining & Geology Department, Government of Meghalaya	25 ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	25 ha.
Government land	-

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Forest land	Nil
Total Mining lease area (MLA), ha	25 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

v. Mining plan details:

Mining Plan was approved by Indian Bureau of Mines (IBM)	The Project Proponent has submitted that the Mining Plan was submitted to Indian Bureau of Mines (IBM) for approval vide application ID PB113 dated 06.10.2023.
Mining Parameters	Quantitative Description
Method of Mining	Opencast mechanized mining
Drilling/Blasting	Deep hole drilling & blasting.
Geological Reserves	52.44 million tons
Mineable Reserves	40.89 million tons
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	2.832 MTPA (including 2.51 MTPA of limestone, 0.322 MTPA of Waste/OB including topsoil).
Life of mine	50 Years [Max production of Lst (ROM) shall be restricted to 2.51 MTPA. Production from this mine at a later stage of ML may get reduced. Additional exploration shall also be taken up which will increase the reserves.]
Mine Bench Height & Bench Width	The height of the bench will be 9 m and a minimum working width of the benches in mineral will be 18 m for safe operation of mining machinery.
No. of Mine Benches	13
Existing Depth, m bgl	NA, as it is a green field project
Ultimate Depth of Mining, m bgl	137
Ground Water Table, m bgl	156
Details of ground water intersection	Water table will not be intersected as it is at 156 m bgl and mining will be done up to 137 m bgl.
Individual bench slope	85° from horizontal
Overall pit slope	<45°
Details of existing/ proposed Crusher	Limestone will be transported to cement plant crusher of 1200 TPH capacity.
Mineral Beneficiation	NA
RoM output size	-1000 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The material after blasting will be loaded by hydraulic excavators of about 2.6 m ³ bucket capacity into tippers of 25 tons carrying capacity for its transportation to crusher at a distance of 4.6 km and temporary waste dump inside mining lease.

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Generation of Topsoil/OB & its Management during plan period & conceptual period	Max. 322,524.25 TPA of Waste/OB including topsoil will be generated. Waste/OB will be dumped temporarily at earmarked places. Later it will be used as blending material after taking permission from the Government. The topsoil generated will be used extensively for plantation.
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	There will be no reject from the mine.

vi. Water requirement:

Total water requirement	40.0 KLD	Fresh water	05 KLD
		Treated water	35 KLD
Source	Water tankers from the company's cement plant.		
Permission	Vide Letter No. AGRO/IRRI-110/96/2004-05/80 dated Shillong, 15 th Sep 2004		
Additional information (if any)	Total water requirement for the proposed mine will be around 40 KLD, out of which 35 KLD will be from STP treated water and 5 KLD of fresh water for domestic purposes.		

vii. Nearest village / town/ highway/railway station / water bodies

Particulars	Particular's Name	Distance & Directions
Village	Lumshnong	1.95 Km NE
Town	Khliehriat	21.70 Km N
Highway	NH-6	0.57 km SE
Interstate Boundary	India-Bangladesh International Boundary	9.08 km SSW
	Meghalaya-Assam State Boundary	12.88 Km SE
Railway station	Hilara railway station	65 km (by road)
Water bodies	Um Badoh Stream	0.85 Km WNW
	Lubha River	3.71 km SE
	Seshympa River	4.87 Km WSW
Forest	Narpuh Reserve Forest	4.13 km SSW

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks

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Forest land within the minelease area and (if yes) status of Forest Clearance	No	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (HoFF), Meghalaya vide Lr.No: MFG.39/NLFC/Mining/ MMMCR/ 2016/JH/15,529 Shillong dated 1 st Feb, 2023 stating that plot of land of 25 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012.
National Park	No	Not Applicable
Wildlife Sanctuary	Yes	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Biodiversity & Wildlife) & Chief Wildlife Warden vide Lr No. FWC/Clearance/12/4006, Shillong dated 1 st Feb, 2023 stating that the aerial distance of the proposed mining of Presbyterian Church located at Lumshnong Village, East Jaintia Hills District from the boundaries of Eco-Sensitive Zone is 2.7 km and Narpuh Wildlife Sanctuary is 3.9 km. This letter does not convey any NOC whatsoever.
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	Yes	
Coastal Regulation Zone (CRZ)	No	Not Applicable
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	There are ten Schedule I Species found in the buffer zone are given below: <i>Hoolock hoolock</i> (Western hoolock gibbon), <i>Nycticebus bengalensis</i> (Slow loris), <i>Prionailurus bengalensis</i> (Leopard Cat), <i>Python molurus</i> (Indian Rock Python), <i>Neofelis nebulosa</i> (Clouded Leopard), <i>Buceros bicornis</i> (Great Pied Hornbill), <i>Canis lupus pallipes</i> (Indian Wolf), <i>Manis pentadactyla</i> (Pangolin), and <i>Melursus ursinus</i> (Sloth bear), <i>Capricornis sumatraensis thar</i> (Himalayan serow).

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Wildlife Conservation Plan	Yes	The Chief Wildlife warden had a meeting with Industries and Government Departments for preparation of Regional Conservation plan for the East Jaintia Hills district under the supervision and guidance of CWLW, Meghalaya and the cost for preparation and implementation of the Regional Conservation Plan may be shared by various project proponents on a proportionate basis keeping in view the likely impacts of each project on the wildlife and their habitat. We also confirmed that we shall be part of the regional conservation plan and will pay the fee as determined for our project.

ix. Green belt/plantation details:

Proposed area for green belt/plantation	At the end of life of mine, out of the total 25 ha area, 20.12 ha will be used for Bench Plantation/ Grassification and 1.46 ha. along the 7.5 m wide peripheral boundary will be developed under green belt.
Budget for green plant & plantation till the end of life of mine.	Rs 1.03 Cr
Budget for nursery	NA
Details of existing plantation and its survival rate	NA as it is greenfield project
No. of tree cuts in the mine lease area and compensatory afforestation	215 trees will be cut in the mine lease. Total about 37854 trees will be planted upto conceptual period.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	1.46 Ha

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the R&R is not involved in this project.

xi. Court case details:

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Court case no and its present status	The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit dated 17.10.2023 stating that they commit to comply with order of the Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 37.30 Crores
Employment	99 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The entire mine lease area of 25 Ha is a Pvt. land. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site. The EAC asked about the status of the Mining Plan. The Project Proponent has informed the EAC that the Mining Plan was submitted to Indian Bureau of Mines (IBM) for approval on 06.10.2023. The scrutiny comments have been received from the IBM and Mining Plan is yet to be approved. NH-6 is located at a distance of about 1.0 km on Southern side and Lumshnong Village is located at a distance of about 3km on NE side. General drainage direction is towards west. Lubha River is located on the South Eastern side. The EAC asked about the distance of the International Boundary from the mine lease area. The Project proponent has informed the EAC that India – Bangladesh International Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side.

The EAC asked about the mineral transportation route. The Project Proponent has informed the EAC that the mineral will be transported by road through NH6 to reach crusher. About 0.8km of company's own road and 0.6 km of public road will be used to reach NH6. Total distance to reach Crusher will be about 4.5 km. The EAC asked about the distance of the width of the public road. The Project Proponent has informed the EAC that the width of the public road is about 7-8m. The EAC asked the Project Proponent to physically verify the width of the public road. Further, the Project Proponent has informed the EAC that the crusher is located at the Cement Plant. The EAC also asked the Project Proponent whether there is any possibility of putting up crusher inside

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the mine lease area to avoid transportation by road from the view point of environment and safety. The Project Proponent has informed the EAC that the entire mine lease area is mineralized zone and crusher at cement plant is also utilized by other mines which leads to put up a another crusher at cement plant. The EAC suggested the Project Proponent to explore the possibility of utilizing mobile crusher at within the mine lease area. The EAC asked about the possibility of transporting the ore through Over Land Belt Conveyor (OLBC). The Project Proponent has informed the EAC that there are elevation issues to lay OLBC and will be explored in future. The EAC noted that a number of mines are going to come up in the study area, the EAC asked the Project Proponent to submit the future year wise production plan to assess the production requirement. The EAC also opined that the Project Proponent needs to explore the possibility of utilizing surface Ripper-Dozer combination along with the hardness of Limestone tested by reputed Institute.

The Project Proponent also informed the EAC that a letter has been obtained from the Office of the Principal Chief Conservator of Forests (HoFF), Meghalaya vide letter dated 1st Feb, 2023 stating that plot of land of 25 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012. The Project Proponent has informed the EAC that exploration level is G1. The EAC asked the Project Proponent to relook the life of the mine. The Project Proponent has informed the EAC that maximum elevation is 406 mRL and minimum is 336 mRL. The ultimate level of excavation will be 269 mRL. The depth of the mining will be 137 m bgl from the surface. The EAC opined that the Project Proponent needs to undertake a slope stability study and shall submit the same in the EIA/EMP report. Maximum production capacity of 2.51 MTPA of Limestone will be achieved in the 5th year of 1st five year plan period. At the conceptual stage, 23.54 ha will be under mining area and out of which 3.02 ha will be converted into water reservoir, 20.12 ha will be under bench plantation and 0.40 ha area under roads. The EAC opined that even though Project Proponent is a part of the Regional Conservation Plan, the Project Proponent needs to submit the Wildlife Conservation Plan for conservation of wildlife.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the India – Bangladesh International Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that *“all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence”*. The EAC was of the view that border area is falling within 20 km radius and hence the EAC opined that the NOC from the Ministry of Defence is prerequisite for

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grant of Terms of Reference (ToR). Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the NOC from the Ministry of Defence.
- ii. The Project Proponent needs to submit the width of the public road.
- iii. The Project Proponent needs to submit the hardness of Limestone tested by reputed Institute.
- iv. The Project Proponent needs to explore possibility of installing fixed/ mobile crusher within the lease area.

1.6 Rohisa Limestone Mine of M/s HeidelbergCement India Limited with Limestone Production Capacity 3.0 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) in the mine lease area of 891.7185 ha, located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat – [F.No: IA-J-11015/19/2023-IA-II(NCM), Proposal No:IA/GJ/MIN/434388/2023, EIA Consultant: M/s J.M. EnviroNet Pvt. Ltd] – Terms of Reference

The instant proposal is for mining of Limestone in Rohisa Limestone Mine of M/s HeidelbergCement India Limited with Limestone Production Capacity 3.0 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) in the mine lease area of 891.7185 ha, located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 20°49’00” N to 20°51’00” N and Longitude: 71°13’00” E to 71°18’45” E. The mine lease area falls under the Survey of India Toposheet No: 41 P/5 (Restricted) and falls in Seismic Zone-III.
- iii. The instant proposal was earlier considered in the 34thEAC meeting held during 27 – 30 July 2021 wherein the Committee was of the view that clarification is required regarding the distance from CRZ through Coastal Zone Management Plan (CZMP) authenticated by the Competent Authority in the State and therefore the Committee returned the proposal in present form as part of mine lease falls under CRZ. Then, the Project Proponent has submitted a fresh proposal for

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Terms of Reference along with the information sought by the EAC and accordingly the proposal was considered in the 18thEAC (Non-Coal Mining) meeting held during 31stJuly & 1stAugust, 2023. After detailed deliberations, the EAC deferred the proposal. The CRZ Division gave their comments on 03.09.2023 and the Project Proponent submitted the information on 19.10.2023 in Parivesh portal and accordingly the proposal was again reconsidered in the EAC meeting held during 14-15 November, 2023.

Based on observation of EAC in its EAC meeting held during 31stJuly & 1stAugust, 2023 and compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held on 31 st July & 1 st August, 2023	Reply by Project Proponent
1	The Ministry may seek comments from the CRZ Division in the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21.10.2022 regarding opinion for CRZ-NOC for Rohisa Limestone Mine of M/s HeidelbergCement India Limited.	The CRZ Division gave their comments on 01.09.2023 as given below: - As per para 3(x) of CRZ Notification 2011 Mining of sand, rocks and other sub-strata materials except, mining of Atomic Minerals notified under Part-B of the First Schedule of the Mining and Minerals (Development) Act, 1957 (67 of 1957) occurring as such or in association with one or other minerals and exploration and exploitation of Oil and Natural Gas, is prohibited in CRZ area. - As the record available in the file and EAC (NCM) noted Project Proponent has carried out the CRZ study conducted by the Institute of Remote Sensing, Anna University, Chennai and project activity falls in CRZ area and as per CRZ Notification it is prohibited activity. - The EAC opined that the Ministry may seek comments from the CRZ Division of the Ministry in reference to the letter from the Forests & Environment Department, Govt. of Gujarat dated 21/10/2022 regarding the opinion for CRZ-NOC for Rohisa Limestone Mine of M/s Heidelberg Cement India Limited. - It is submitted that as already mentioned above the activity is prohibited as per CRZ Notification, however, it is requested the

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		Division concern may be provided a statutory document as per CRZ Notification para 4.2 i.e. 1:4000 scale map, SCZMA recommendation etc. for a complete examination of the project.															
2	The Project Proponent needs to ensure that the depth of mining may be planned in such a way that the floor RL at any place should not be lower than the mean sea level in the modified mining plan submitted for approval.	The Project Proponent has submitted that as per Modified Mining Plan, there is no proposal for mining in CRZ area including its appropriate buffer. Also, aiming the prevention of sea water ingress, the ultimate pit depth in the non-CRZ area has been kept up to 0m AMSL only. The mineable reserves have also been estimated up to 0m AMSL only. It shall be ensured during course of mining that the excavation shall not be below 0m AMSL. The Project Proponent also submitted the relevant page of modified mining plan showing the above statement and conceptual cross sections.															
3	The Project Proponent needs to submit the modified mining plan approved by Indian Bureau of Mines (IBM).	The Project Proponent has submitted that the Modified Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM), Gandhinagar vide Letter No. MCDR-MPCPOCaFI/10/2023-GNR-IBM_RO_GNR MP-472 Mine Code: 38GUJ439001 dated 21.09.2023. It is also mentioned that no mining activity shall be carried out in CRZ zone and related zones as notified time to time, even in case of proposal made therein.															
4	The Project Proponent needs to submit the copies of the letter wherein State DMG has mentioned that the CRZ area shall be kept as a non mining zone instead of surrendering it.	The Project Proponent has submitted that CRZ study has been conducted by the Institute of Remote Sensing, Anna University, Chennai. As per approved CZMP Map of Gujarat and Local Level Coastal Regulation Zone Map prepared by Institute of Remote Sensing, (IRS), Chennai GCZMA has confirmed that out of the total mine lease area i.e. 891.7185 ha, an area of 183.6332 ha falls under CRZ. <table border="1"> <thead> <tr> <th>S. No</th><th>CRZ Classification</th><th>Area (in Ha)</th></tr> </thead> <tbody> <tr> <td>A</td><td>CRZ - 1B</td><td>139.9037</td></tr> <tr> <td>B</td><td>CRZ – III (NDZ)</td><td>30.9217</td></tr> <tr> <td>C</td><td>CRZ – III (200 m to 500 m from HTL)</td><td>12.8078</td></tr> <tr> <td>I</td><td>Total Area falling in</td><td>183.6332</td></tr> </tbody> </table>	S. No	CRZ Classification	Area (in Ha)	A	CRZ - 1B	139.9037	B	CRZ – III (NDZ)	30.9217	C	CRZ – III (200 m to 500 m from HTL)	12.8078	I	Total Area falling in	183.6332
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			CRZ	
		II	Outside CRZ	708.0853
			Total	891.7185
		Source: CRZ Study Report prepared by IRS, Anna University, Chennai		
		The Project Proponent also submitted that a request letter for dividing mining lease was submitted to the Commissioner-Geology & Mining, Govt. of Gujarat, vide letter no. HCIL/GM-AM/GML/2022/38, dated 11.07.2022. A letter dated 10.04.2023 was issued by the Commissioner of Geology & Mining, Gandhinagar stating that the Company shall not carry out any activities otherwise permissible as per CRZ Notification within area falling in CRZ without prior permission from the Competent Authority. Again, a letter was submitted on 14.08.2023 to Commissioner of Geology & Mining, Gandhinagar for amending the above said letter dated 10.04.2023 as desired by the EAC in its meeting held on 31.07.2023. Commissioner of Geology & Mining, Gandhinagar vide Letter no. CGM/Lease/ML/Heidelberg/2022-23/3774, dated 05.10.2023 had issued a letter stating that the Company shall not carry out any mining activities in the area falling in CRZ without prior permission of competent authority and such area shall be kept as a non-mining zone instead of surrendering it.		
5	The Project Proponent needs to submit the existing soil salinity data of the Mine lease area i.e adjacent to CRZ, within CRZ and farthest from CRZ boundary.	The Project Proponent has submitted that Central Soil Salinity Research Institute (CSSRI) is in process to carry out the study regarding the soil salinity of the Mine lease area (i.e. adjacent to CRZ, within CRZ and farthest from CRZ boundary). The Project Proponent also submitted the correspondence made by CSSRI vide email dated 18.10.2023 regarding the methodology and work schedule of the study.		

iv. Details of Mine Lease:

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- a) Initially, the prospecting license was granted by the State Govt. on 31.05.2000 over an area of 891.7185 Ha in Villages Rohisa, Balana and Vadhera of Taluka - Jafrabad of Dist. Amreli (Gujarat) in favour of M/s Indorama Cement Ltd.
- b) Then, the Govt. of Gujarat vide its letter No. MCR-112005-987-CH-1 dated 08.02.2006 granted the Letter of Intent for grant of Mining lease for minerals Limestone and Marl over an area of 891.7185 Ha in favour of M/s Indorama Cement Ltd.
- c) Pursuant to a Scheme of Amalgamation sanctioned by the Hon'ble High Courts of Bombay and Karnataka, Indorama Cement Limited was amalgamated with Mysore Cements Limited and the new entity was renamed as HeidelbergCement India Limited w.e.f. 16.04.2009. The same was intimated to the office of Deputy Secretary, Industry and Mines Department, Govt. of Gujarat requesting to take note and confirm the aforesaid change of name of the company so that permits and licenses required to set up an integrated Cement Plant can be obtained and also for incorporation of change of name of company in relevant records and documents. The process took its own time and ultimately the Govt. of Gujarat issued the order no. MCR-112005-ML 987-CHH-1 dated 10.01.2017 for grant of mining lease over an area of 891.7185 Ha in favor of M/s HeidelbergCement India Limited.
- d) The mine lease deed was executed on 09.09.2020 and registered on 15.09.2020 for the mineral Limestone and Marloveran area of 891.7185 Ha for a period of 50 years i.e., upto 14.09.2070 in favor of M/s HeidelbergCement India Limited.

v. Land Use/Land Cover of the Mine Lease Area:

Private Agriculture land	526.1699 ha
Government land	292.6380 ha
Gauchar land	72.9106 ha
Forest land	-
Total Mining lease area (MLA), ha	891.7185 ha
Private land for crusher, workshop & other infrastructure outside the MLA	Crusher to be Installed in premises of Proposed Interlinked Cement Plant
Additional information (if any)	Total ML Area is 891.7185 out of which 183.6332 ha falls in CRZ & 72.9106 ha is Gauchar land.

vi. Details of Mining Plan: -

Modified Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	684 (4) (1)/MP-358/2021-22 GNR
	Date	01.09.2021
	Mineral & (Major/Minor)	Limestone (Major)

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	Mine Lease Area, Ha	891.7185
	Validity	2021-22 to 2024-25
Additional information (if any)	Mining Plan with Progressive Mine Closure Plan was approved by IBM vide COM (NZ) letter no.682(23)(452)/2006-Udai, dated 23.01.2006 in the name of Indorama Cement Ltd. Modified mining plan in the name of HeidelbergCementIndia Limited (HCIL) has been approved by IBM vide letter dated 684(4)(1)/MP-358/2021-22GNR dated 01.09.2021. Now, HCIL has submitted the modification in the mining plan for further approval to IBM.	
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mechanized method	
Drilling/Blasting	No drilling & blasting is involved. The mineral will be mined by deploying surface miners, dumpers, bulldozer, and excavators/loaders.	
Geological Reserves	230.438 Million Tonnes	
Mineable Reserves	100.679 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Limestone: 3.0 Million TPA Top Soil: 0.147 Million TPA Total Excavation: 3.147 Million TPA	
Life of mine	~34 years (Based on the future exploration life of mine may change)	
Mine Bench Height & Bench Width	Bench Height: 6 m Bench Width: 12 m	
No. of Mine Benches	5	
Existing Depth, m bgl	This is proposed mine	
Ultimate Depth of Mining, m bgl	26 m BGL	
Ground Water Table, m bgl	26 m BGL	
Details of ground water intersection	This proposal is for Terms of Reference (ToR). Details will be incorporated in EIA/EMP Report	
Individual bench slope	75°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	Crusher to be installed in premises of proposed Interlinked Cement Plant	
Mineral Beneficiation	Mineral Beneficiation is not involved.	
RoM output size	-80 mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	The mined materials will be dozed and fed to a hopper located at mines using dumpers from where the material will be conveyed to the Cement Plant via covered conveyor belt.	
Generation of Topsoil/OB & its Management during plan period &	During Plan Period About 0.147 Million Tonnes of top soil will be	

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conceptual period	generated which will be simultaneously used for the greenbelt/plantation purpose. At Conceptual Stage About 5.5 Million Tonnes of top soil to be generated which will be used in Greenbelt/plantation.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	None

vii. Water requirement:

Total water requirement	150 KLD	Fresh water	142 KLD
		Treated water	8 KLD
Source	Desalination Plant (will be installed with Cement Plant) & from mine sump		
Permission for withdrawal/ intersection along with details of grant and its validity	This proposal is for Terms of Reference (ToR). Details will be incorporated in EIA/EMP Report.		

viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Village	Balana	Adjacent in ENE direction
	Vadhera	~200 m in ENE direction
	Rohisa	Surrounded by ML
	Dharabander	~0.7 km in WNW direction
	Khatrivada	~1.0 km in ENE direction
Town	Jafrabad	~5.0 km in ENE direction
Highway	SH 34	~0.3 km in ENE direction
	SH 90	~0.3 km in ENE direction
	NH 51	~5.0 km in NW direction
	SH 104	~3.5 km in SW direction
Interstate Boundary	None	-
Railway Station/Railway line	Una Railway Station	~20 km in West direction
Water Bodies	Arabian Sea	In South direction
	Bhatia Nadi	Adjacent in WNW direction
	RawalNadi	~1.0 km in WSW direction
	RupanNadi	~1.5 km in WNW direction
	Malan Nadi	~3.0 km in WNW direction
	Jafrabad Creek	~6.0 km in ENE direction
	RaidiNadi	~7.5 km in ENE direction
Forest	RF	Adjacent in SW direction
	RF	~8.5 km in SW direction
	RF	~8.5 km in ENE direction

ix. Presence of Environmentally Sensitive areas in the study area:

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Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks																								
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent has obtained the letter from the Office of the Principal Chief Conservator of Forests, Gandhinagar vide dated 04.04.2022 stating that no forest land is involved in the project.																								
National Park	No	Project Proponent reported that no National Park, Wild Life Sanctuaries, Biosphere Reserves, Tiger Reserves, Wildlife Corridors, etc. falls within 10 km radius study area. The Project Proponent has obtained the letter from the Office of the Principal Chief Conservator of Forests, Gandhinagar vide dated 04.04.2022 certifying that the distance between mining lease for mineral limestone of M/s Heidelberg Cement India Limited situated in Village: Rohisha, Balana and Vadhera, Area: 891.7185 ha. Dist: Amreli is 21.85 km away from the Gir Sanctuary. PP also submitted the map showing the distance of the forest area and Gir Wildlife Sanctuary from the mine lease area and which was authenticated by the Chief Wildlife Warden, Gandhinagar.																								
Wildlife Sanctuary	No																									
Elephant/Tiger Reserve	No																									
Eco-Sensitive Zone (ESZ)/Eco-Sensitive Area (ESA)	No																									
Coastal Regulation Zone (CRZ)	Yes	The Project Proponent has submitted that the CRZ study has been conducted by the Institute of Remote Sensing, Anna University, Chennai. As per approved CZMP Map of Gujarat and Local Level Coastal Regulation Zone Map prepared by Institute of Remote Sensing, (IRS), Chennai GCZMA has confirmed that out of the total mine lease area i.e. 891.7185 ha, an area of 183.6332 ha falls under CRZ. <table border="1"> <thead> <tr> <th>S. No.</th><th>CRZ Classification</th><th>Area (In Ha)</th></tr> </thead> <tbody> <tr> <td>A</td><td>CRZ - 1B</td><td>139.9037</td></tr> <tr> <td>B</td><td>CRZ – III (NDZ)</td><td>30.9217</td></tr> <tr> <td>C</td><td>CRZ – III (200 m to 500 m from HTL)</td><td>12.8078</td></tr> <tr> <td>I</td><td>Total Area falling in CRZ</td><td>183.6332</td></tr> <tr> <td>II</td><td>Outside CRZ</td><td>708.0853</td></tr> <tr> <td></td><td>Total</td><td>891.7185</td></tr> <tr> <td colspan="3">Source: CRZ Study Report prepared by IRS, Anna University, Chennai</td></tr> </tbody> </table> The Project Proponent also submitted that the	S. No.	CRZ Classification	Area (In Ha)	A	CRZ - 1B	139.9037	B	CRZ – III (NDZ)	30.9217	C	CRZ – III (200 m to 500 m from HTL)	12.8078	I	Total Area falling in CRZ	183.6332	II	Outside CRZ	708.0853		Total	891.7185	Source: CRZ Study Report prepared by IRS, Anna University, Chennai		
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		Commissioner of Geology & Mining, Gandhinagar vide letter no. CGM/Lease/ML/Heidelberg/2022-23/848 dated 10.04.2023 has mentioned that an area of 183.6332 ha falls within the mine lease area under various categories of Coastal Regulation Zone. So, as mentioned in letter dated 21.10.2022, Director (Environment) & MS, GCZMA, GOI, the company shall not carry out any activities otherwise permissible as per CRZ notification within area falls in CRZ without prior permission of Competent Authority.

x. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total Greenbelt/Plantation: 136.31 ha Greenbelt (7.5 m): 22.10 ha Plantation: 114.21 ha (3.56 ha on Bench Plantation & remaining 110.65 ha on unworked area, Road side, safety zone). No. of Saplings Proposed: 3,40,775
Budget for green plant & plantation till the end of life of mine.	Rs. 6.81 Crore
Budget for nursery	Rs. 10 Lakh
Details of existing plantation and its survival rate	Survival Rate will be maintained 95%
No. of tree cuts in the mine lease area and compensatory afforestation	250 trees will be cleared
Particulars for Green belt/plantation	Area covered (In Ha)
7.5 m barrier & non-mineralized zone	22.10ha
50 m safety zone of nallah, roads, electric lines	2.74 ha area to be covered along the roads out of 110.65 ha total plantation

xi. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the land will be purchased directly from the land owners on willing buyer willing seller basis. Adequate compensation based on mutual negotiations will be paid for the land, standing crop and any other infrastructure affected by the procurement of land. No. of Villages: 3 No. of Project Affected Families: 350 No. of Project Displaced Families: 104 Detailed R & R study is yet to be carried out.

xii. Court case details:

Court Case, No and its present status	The Project Proponent has reported that there is no court case pending against the project.

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Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted an undertaking vide letter dated 23.06.2023 stating that there is no litigation pending against the project and/or any direction/order passed by any Court of Law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibility will be borne by the Company.

xiii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted an affidavit in a non-judicial stamp paper of Rs 100 bearing no: BK 485498 dated 24.06.2023 stating that the company hereby undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Rs. 70 Crores
Employment (Nos)	91 Persons

3. Observation and Recommendation of the EAC: -

The Project Proponent/Consultant presented the KML to show the site features in the study area. The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The EAC noted the comments given by the CRZ Division on 01.09.2023. The Project Proponent has shown the area of 183.6332 ha falls under CRZ and informed the EAC that no mining will be undertaken in CRZ area. The EAC asked the Project Proponent about the distance of the International Boundary and seaboard frontier. The Project Proponent has informed the EAC that the India-Pakistan International Boundary is located at a distance of about 370 km, N and the mine lease area is 12 nautical miles away from the seaboard frontier. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that *"all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence"*.

The Project Proponent also informed the EAC that there is no proposal for mining in CRZ area including its buffer. The mineable reserves have also been estimated up to 0m AMSL only and it will be ensured that during course of mining that the excavation

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will not be below 0m AMSL. The above statement is also included in the modified mining plan. Further, the Project Proponent has informed the EAC that the Modified Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM), Gandhinagar vide letter dated 21.09.2023. The Project Proponent also informed the EAC that Commissioner of Geology & Mining, Gandhinagar vide letter dated 05.10.2023 had issued a letter stating that the Company shall not carry out any mining activities in the area falling in CRZ without prior permission of competent authority and such area shall be kept as a non-mining zone instead of surrendering it. The Central Soil Salinity Research Institute (CSSRI) is in process to carry out the study regarding the soil salinity of the Mine lease area (i.e. adjacent to CRZ, within CRZ and farthest from CRZ boundary) and the same will be submitted in the EIA/EMP report. The EAC asked the Project Proponent about the land acquisition plan. The Project Proponent has informed the EAC that the land will be purchased directly from the land owners on willing buyer willing seller basis. Initially, mining will be carried out in the Govt. land and then the Private land will be purchased. The EAC asked about the location of the crusher. The Project Proponent has informed the EAC that crusher is proposed to be installed in the Cement Plant.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) subject to submission of No Objection Certificate(NOC) from Ministry of Defence for Rohisa Limestone Mine of M/s HeidelbergCement India Limited with Limestone Production Capacity 3.0 Million TPA, Top Soil 0.147 Million TPA (Total Excavation: 3.147 Million TPA) in the mine lease area of 891.7185 ha, located at Villages: Rohisa, Balana and Vadhera, Taluka: Jafrabad, District: Amreli, Gujarat for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.
- ii. The Project Proponent needs to submit the existing soil salinity data of the Mine lease area i.e adjacent to CRZ, within CRZ and farthest from CRZ boundary.
- iii. The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.

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- iv. The project proponent needs to submit 1:4000 scale map of the mine lease location and its 10 km radius.
- v. The Project Proponent needs to submit the distance of the Ultimate Pit Limit from the School and Habitations along with their mitigation measures to protect it from the mining activity. The Project Proponent also needs to submit the details of strength of school.
- vi. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration due to movement of HEMM.
- vii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- viii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- ix. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.
- x. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xi. The Project Proponent needs to increase the no. of saplings proposed. The Project Proponent also needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along

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with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.

- xii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

Day 2: 15th November, 2023 (Wednesday)

2.1 Gothra Parasrampura West Limestone Mine Block' of M/s ACC Ltd for mining of Limestone with production capacity of 1.0 MTPA of Limestone & 1.57 MTPA of Overburden including Topsoil (Total excavation: 2.57 MTPA) in the mine lease area of 287.7539 ha, located at Gothra Village, Navalgarh Taluk, Jhunjunu District, Rajasthan – [F.No: IA-J-11015/ 36/2023-IA.II(NCM), Proposal No: IA/RJ/MIN/449491/2023; EIA Consultant: M/s Ecomen Laboratories Pvt. Ltd] – Terms of Reference

The instant proposal is for mining of Limestone in Gothra Parasrampura West Limestone Mine Block' of M/s ACC Ltd with production capacity of 1.0 MTPA of Limestone & 1.57 MTPA of Overburden including Topsoil (Total excavation: 2.57 MTPA) in the mine lease area of 287.7539 ha, located at Gothra Village, Navalgarh Taluk, Jhunjunu District, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

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- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°46'10.8821"N to 27°47'17.9410"N and Longitude: 75°19'44.8420"E to 75°21'10.1965"E. The mine lease area falls under the Survey of India Toposheet No: 45M/5.

iii. Details of Mine Lease:

S. No.	Prospecting License/Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent for grant of mining lease vide Lr.No: P.2(28)Khan/Group-2/2022,	18.11.2022	Limestone	2 years	Govt. of Rajasthan	287.7539 Ha.

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	267.036Ha
Government land	20.7179Ha
Forest land	Nil
Total Mining lease area (MLA)	287.7539 Ha.
Private land for crusher, workshop & other infrastructure outside the MLA	-

v. Mining Plan details:-

- a) The Project Proponent has submitted that the Mining Plan along with the Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide Lr.No. MCDR-MPCOLST/7/2023-AJM-IBM-RO-AJM dated 30/05/2023 over an area of 287.7539 ha for 05 years period from the date of execution of the mining lease.
- b) The method of mining will be opencast mechanized mining with deep hole drilling and blasting.
- c) Total Mineral Reserves is estimated as 6,92,98,009.95 Tonnes and Minerals Resources estimated as 16,31,62,054.12 Tonnes. Life of the mine is estimated as 69 years based on current exploration.
- d) The mine benches will be formed with a bench height of 8m and bench width of 8m.

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- e) During the first five years of the Mining Plan period, a total of 50,67,369.00 Tons of waste will be generated which will be stacked at the predefined place as per the approved Mining Plan. The top soil generated will be stacked and preserved at the earmarked places and will be utilized for the afforestation.
- f) Hydraulic excavators will be deployed to load the blasted limestone into the dump trucks. The loaded limestone will be fed to the crusher. Crusher location is still undecided and it may be decided at later stage.
- vi. The total requirement of water will be around 75 KLD which will be sourced from existing pit rain harvested water and well water.
- vii. The Project Proponent has submitted that the part of Village Basawa falls in the western part of block area upto almost 200m inside the area and village Nehron ki Dhani also observed in the southern part of the area up to 100 m within the area. PWD road from village Baswa to Chaurhani passes through Block area. State Highway SH-25B passes through Block Area in NW part of block area. There are 3 nos of existing old abandoned quarries with a broken up area of 2.89 Ha in the subject area of auctioned mining block as per the field observation.
- viii. The Project Proponent has submitted that there is no forest land involved in the mine lease area. There is no national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve/coastal zone/archaeological site/historical places in the core (Block) and buffer zone (10 km radius of the block).
- ix. The Project Proponent has submitted that the instant proposal does not envisage Rehabilitation and Resettlement (R&R).
- x. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
- xi. The Project Proponent has submitted that the total cost of the project is Rs 134.17 Cr. About 185 persons (Direct: 85 persons + Indirect: 100 persons) will get employment.

3. Observation and Recommendation of the EAC:

The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area. The Project Proponent has informed the EAC that the State Highway (SH) 25B and public road from Village Baswa to Chaurhani passes through the mine lease area. There will be no diversion of public road. There are two villages on western direction and the other on southern direction are partly located within the mine lease area. The total mine lease area is 287.7539 Ha, out of which Private land is 267.036Ha and Govt. land is 20.7179Ha. The Project Proponent has also shown the patches of the Private land and Govt. land within the mine lease area. A school is located in the western side of the mine lease area. No National Park, Wildlife Sanctuary, ESZ/ESA located within 10 km radius of the study area.

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The Project Proponent has informed the EAC that the mining activity will start from south eastern part of the mine lease area and will progress towards south western side of the mine lease area. As on date, G2 level exploration has been completed. G2 level exploration will be converted into G1 level exploration within 1st five years of plan period. The EAC asked the Project Proponent about the mineral transportation route. The Project Proponent has informed the EAC that the transportation route is not yet decided and will be decided in due course time depending upon the location of the cement plant. Till then, the material will be utilized in the sister plants in and around Rajasthan by and will be transported by road to a distance of about 250 – 300 km. Further, the Project Proponent has informed the EAC that there are three old pits over an area of 2.89 ha existing in the mine lease area and these pits were in existence before the mine lease area was put up for auction. These are shallow pits created by the local people for construction of road. Agricultural activities are being taken place in the mine lease area. The Project Proponent also informed that there is an another mine lease located adjacent to the instant mine lease sharing the common boundary of the mine lease area. In future, mining will be done in common boundary after obtaining statutory permission and agreement with the adjacent lease holder (M/s Dalmia Cement (Bharat) Ltd).

The Project Proponent has informed the EAC that the northern part of the mine lease area is non-mineralized zone. Dumps will be located in the non-mineralized zone. The EAC noted that to reach the waste dump, the Project Proponent has to cross the public road. The Project Proponent has informed the EAC that the road will be shifted in appropriate time or an underpass will be constructed for safe movement of material. The EAC observed that the Project Proponent has given two statements regarding the shifting of the public road. The EAC asked about the presence of Schedule-I species in the study area. The Project Proponent has informed the EAC that as of now reconnaissance survey has been carried out and no Schedule-I species reported. A detailed study will be covered in the EIA/EMP report. The EAC opined that the Project Proponent needs to carry out the enumeration of flora within the mine lease area before getting approval for tree cutting. The EAC asked the Project Proponent about the status of the R&R plan, since the land is not in possession with the Project Proponent, how the Project Proponent will ensure that the mining activity will take place. The Project Proponent has informed the EAC that the discussion with the local people for negotiation has been started and it is under process. The EAC was of the view that what will be scenario, if the land owners do not agree to give their lands.

The EAC noted that as per Common Application Form and as per approved mining plan, crusher is not a part of the proposal and whereas in Prefeasibility report, it has been mentioned that the crusher will be constructed at the time of execution of mine lease and the location of the crusher may be decided at a later stage. Further, cost of

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the crushing plant is also included in the Project Cost of Rs 134.17 Cr. The EAC was of the view it is not clear whether the Project Proponent is proposing to install a crusher within the mine lease area or not. The Project Proponent has informed the EAC that an area of 101 ha will remain unutilized at the conceptual stage. In this regard, the EAC noted that in Prefeasibility report submitted by the Project Proponent, it has been mentioned that an area of 96.7539 ha will remain unutilized. The statements made by PP were contradictory. The EAC was of the view that the Project Proponent needs to submit the exact pre and post land use plan as per approved mining plan. The Project Proponent has informed the EAC that the maximum production of 1.0 MTPA will be achieved in the 5th year. Mined out area will be partly rehabilitated and partly converted into water reservoir.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC observed that the Project Proponent has not yet decided the mineral transportation route. The EAC was of the view that atleast the Project Proponent should have come with the multiple options for transportation route and also the options for land acquisition with merits and demerits. The EAC noted that the Project Proponent/Consultant is not able to convince or justify the EAC about the mineral transportation route, need of a crusher, public road passing within the mine lease area and plan for land acquisition for determining the terms of reference. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the map showing the mineral transportation route to destination along with the design of the road.
- ii. The Project Proponent needs to clarify whether public road within the mine lease area will be diverted or an underpass will be proposed.
- iii. The Project Proponent needs to submit the exact pre and post land use plan as per approved mining plan.
- iv. The Project Proponent needs to clarify whether there is a requirement of crusher or not. Location of the crusher needs to be specified and transportation of crushed limestone to the required destination needs to be firmed up.
- v. The Project Proponent needs to submit the distance of the school from the Ultimate Pit Limit, strength of the school and the sequence of year wise mining operation near the school.

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- vi. The Project Proponent needs to submit the plan for acquisition of land with merits and demerits.

2.2 Proposed GothraParasrampura East Block (Auctioned Block) of M/s Dalmia Cement (Bharat) Ltd. with Limestone Production Capacity 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with Installation of Crusher 1000 TPH with Screen/Wobbler in the mine lease area of 460.4006 ha, located at Villages: Devgaon, Shivrinar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan – [F.No: :IA-J-11015/37/2023-IA.II(NCM), Proposal No: IA/RJ/MIN/446436/2023; EIA Consultant: M/s JM EnviroNet Pvt. Ltd] – Terms of Reference (ToR)

The instant proposal is for mining of Limestone in Gothra Parasrampura East Block (Auctioned Block) of M/s Dalmia Cement (Bharat) Ltd. with proposed Limestone Production Capacity of 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with installation of Crusher 1000 TPH with Screen/Wobbler in the mine lease area of 460.4006 ha, located at Villages: Devgaon, Shivrinar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°47’59.3189”N to 27°46’32.9662”N and Longitude: 75°20’50.0430”E to 75°23’ 05.7004”E. The mine lease area falls under the Survey of India Toposheet No: G43D5 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S. No.	Prospecting License/Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent was issued vide	08.03.2023	Limestone	2 Years Valid upto 07.03.2025	Directorate of Mines & Geology,	460.4006

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	letter No. P.2(27) Khan/Group- 2/2022				Mines and Petroleum Department, Govt. of Rajasthan	

iv. Land Use/Land Cover of the Mine lease area:

Private land	438.9386 ha		
Government land	13.0505 ha		
Grazing Land	8.4115 ha		
Forest land	-		
Total Mining lease area (MLA)	460.4006 ha		
Private land for crusher, workshop & other infrastructure outside the MLA	-		
Additional information (if any)	1000 TPH Capacity of Crusher to be installed within the ML		
	Pre-mining Land Use	Area in Ha as per revenue record	Remarks
	Private Khatedari Land	438.9386	Scattered Houses/structure & trees/shrubs exist on Pvt. Agricultural land
	Grazing Land	8.4115	Falls in Village Shivnagar (8.1333Ha) containing majority of consolidated habitation of BhilonkiDhani and Village NayaParasrampura (0.2782Ha). DCBL has proposed to surrender upon lease execution.
	Government Waste Land	13.0505	Government Wasteland includes area under: • Linear public utilities /structure like Roads, electric lines, telephone lines etc. -3.04 ha • Area under temple, crematorium, Power Substation etc.- 3.4 ha • Settlements, temple, Degraded Pits & Excavations etc.
	Settlements	--	Settlements/habitation is spread in patches over an area of ~7.5312 Ha. Habitations are mostly on Govt. Land and Charagah Land.
	Degraded	--	7.57 Ha. Mostly in Govt. land

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	Pits & Excavation		including one ML of 1.942 ha held under ML no. 82/2000
	Total	460.4006	

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	MCDR-MPC0LST/9/2023-AJM-IBM_RO_AJM	
	Date	27.07.2023	
	Mineral & (Major/Minor)	Limestone, (Major mineral)	
	Mine Lease Area, Ha	460.40	
	Validity	5 Years from the date of the Mine Lease Execution. Mining lease is yet to be granted and executed.	
Mining Parameters		Quantitative Description	
Method of Mining		The proposed method of mining will be mechanized opencast method of mining with the use of HEMM with deep-hole drilling & blasting. It is proposed to mine with benches of 05 m height and 20m width for Overburden, 10m height and 30m width for Ore. The directions of movement of benches in south direction. Blast holes of 110-115 mm dia. are proposed to be drilled by using drill machine and blasting with ANFO with Booster charge bucket capacity excavation dumpers of 50 tonnes capacity and transported to wobbler & crusher combination for sizing.	
Drilling/Blasting	S. No.	Parameter	Description
	1	Bench Height	10m
	2	Depth of Blasthole	11m
	3	Burden	4m
	4	Spacing	6m
	5	Hole diameter	110-115mm
	6	Powder Factor	8.5 Tonnes/Kg
Total Geological Resource		157.81 Million Tonnes	
Mineable Reserves		47.85 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)		Limestone Production Capacity: 3.0 Million TPA OB - 10.3191 Million TPA Soil- 1.271537 Million TPA Total Excavation: 14.590637 Million TPA	
Life of mine		~22 years (Based on the proposed exploration life of mine may change)	
Mine Bench Height & Bench Width		Bench Height: 5 to 10 m Bench Width: 20 to 30m	

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No. of Mine Benches	16
Existing Depth, m bgl	This is proposed mine
Ultimate Depth of Mining, m bgl	114m BGL
Ground Water Table, m bgl	120 m BGL
Details of ground water intersection	Mining is proposed upto 114mbgl. The general ground water table will encounter at about 120 mbgl. Therefore, ground water regime will not be intercepted.
Individual bench slope	85°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of 1000 TPH capacity is proposed to be installed within the ML
Mineral Beneficiation	Screen/wobbler will be installed
RoM output size	75 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Excavated limestone will be transported to crusher by dedicated road through 60 tonner dumpers. The crusher is proposed within the area. This block has been auctioned for non-captive use. Hence, initially it is proposed to sell Limestone to cement plants and end use industries as and when required by road and subsequently DCBL has proposal to set up its own cement plant nearby for which crushed limestone for captive consumption will be transported via covered conveyor belt. Limestone sale to end-users will be by road.
Generation of Topsoil/OB & its Management during plan period & conceptual period	During Plan Period: 0.43 Million tonnes of soil will be generated which will be used in Greenbelt/Plantation and 8.4 Million Tonnes of waste will be generated which will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance. Area earmarked for Top Soil stacking is 7.4 Ha and Overburden/Waste Dumping 30 Ha. At Conceptual Stage: 3.46 Million Tonnes of soil to be generated which will be used in Greenbelt/Plantation and 212.64 Million Tonnes of waste to be generated which will be used in same will be used for backfilling in 123.14 ha exploited pit area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-
Additional information(if any)	Top soil generated will be used in

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	Greenbelt/Plantation. Waste/OB will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance and remaining is proposed to be used for backfilling of excavated area.

vi. Water requirement:

Total water requirement	75.0 KLD	Fresh water	60.0 KLD
		Treated water	15.0 KLD
Source	Ground water and Mine Sump water as when developed.		
Permission for withdrawal/intersection along with details of grant and its validity	This proposal is for ToR. Details will be incorporated in EIA/EMP Report.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/ monument/forest:

Particulars	Particular's Name	Distance &Directions
Village	Minon Ki Dhani	Within the ML
	Shivnagar (Bhilon Ki Dhani)	Scattered Habitation Within the ML
	Devgaon	Scattered Habitation Within the ML
Town	Town: Nawalgarh	~ 9.0 km in NW Direction
	City: Sikar	~ 22.0 km in SW Direction
Highway	SH-25B	~ 1.8 km in West Direction
	SH-37	~ 8.5 km in East Direction
	SH-378	~ 9.0 km in SE Direction
	SH-8	~ 9.5 km in WNW Direction
Interstate Boundary	None	-
Railway Station/Railway line	Nawalgarh Railway Station	~12.0 km in NW Direction
Water Bodies	Udaipur Lohagarh Ki Nadi	~0.2 km in NE Direction
Forest	Shakambari Conservation Reserve/Raghunathgarh PF	~9.3 km in SE Direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No forest land fall within the ML
National Park	No	There is no National Park, Wildlife Sanctuary, Elephant/Tiger
Wildlife Sanctuary	No	

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Elephant/Tiger Reserve	No	Reserves etc. within 10 km radius study area.
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	Yes	Shakambari Conservation Reserve Boundary starts at 9.3 km SE, Notified by Govt. of Rajasthan vide Notification P.3(16)/Van/2009 dated 09.02.2012 in the Raghunathgarh PF area.
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	-
Wildlife Conservation Plan	-	-

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total Greenbelt/Plantation: 178.70 ha Greenbelt (7.5 m): 8.28 ha Plantation: 170.42 ha (123.14 ha on Backfilled area, 35.46 ha on Bench Plantation & 11.82 ha on Reclaimed area) No. of Saplings Proposed: 1,70,420 (considering 1000 trees/ha)
Budget for green plant & plantation till the end of life of mine.	Rs. 3.4 Crores
Budget for nursery	Rs. 10 Lakhs
Details of existing plantation and its survival rate	Survival rate will be maintained 70- 80%
No. of tree cuts in the mine lease area and compensatory afforestation	~500 trees will be cleared Compensatory Afforestation: Total 1,70,420 trees will be Planted
Particulars for Green belt/plantation	Area covered (In Ha)
7.5 m barrier & non-mineralized zone	8.28 ha
50 m safety zone of nallah, roads, electric lines	~23.0 ha. of safety zone (50 m) along road is proposed
500 m safety zones of nearest habitation villages	-

x. Rehabilitation & Resettlement (R&R):

R & R details	Total mine lease area is 460.4006 ha comprises 438.9386 ha of Private land, 13.0505 ha of Government wasteland and 8.4115 ha of Grazing (Charagah) land. DCBL has following options for acquisition of land for its proposed mining project: ➤ Option 1: Acquire land falling in the mining lease area through provisions of LARR Act, 2013 and rules made thereunder. ➤ Option 2: Direct Purchase Mode: It is proposed to purchase the private agriculture Directly through mutual

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	agreement with the land holders at negotiated rates and terms and conditions. Basis of Land Compensation will be in line of the RFCTARR Act 2013 (Right to Fair Compensation, Transparency in land Acquisition and Rehabilitation & Resettlement) or similar acts of Govt. of Rajasthan/Rules made by Govt. of Rajasthan under LARR. Options may also be evaluated to obtained land on lease/rental directly from the land owners at mutually agreed terms & conditions. ➤ Option 3: Securing land by payment of the annual surface compensation under the provision of Sec. 24 of the MMDR Act, 1957 and Rule 51 of The MCR Rules, 2016. ➤ DCBL proposes to procure land under Option 3. As per Land Schedule the mine site falls under 7 Revenue Villages. Total Project Affected Families are 335 out of which about 60 families (from core zone) is likely to be displaced falling in the mineralized zone/minable area. Displacement will be done in a phased manner with the advancement of mining operation and adequately compensated at a mutually agreed price. These details may be changed after the detailed study of R&R survey. Charagah land is proposed to be surrendered at the time of execution and consolidated habitation of village Bhilonkidhani on Charagah land will not be disturbed.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 03.10.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit dated 03.10.2023 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 250 Crores
Employment	85 persons

3. Observation and Recommendation of the EAC:

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The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the common lease boundary of the instant mine lease area sharing with M/s Shree Cement Ltd on the northern side which is under operation and also with M/s ACC Ltd on the western side. The Project Proponent also shown the Cement Plant belonging to M/s Shree Cement Ltd. Further, the Project Proponent has informed the EAC that after execution of the mine lease deed, the matter regarding mining in common boundary will be taken up with the adjoining lease holders as per 106(2)(b) of the Metalliferous Mines Regulations, 1961. Accordingly, amendment in EC will be obtained in future. Udaipur Lohagarh Ki Nadi is flowing adjacent to the mine lease area i.e., 200m on the eastern side. The nadi is mostly dry and water is observed during only in monsoon season. Raghunathgarh PF is located at a distance of about 9.5 km, SE from mine lease area. No water bodies present within the mine lease area. There were 6 old pits over an area of 1.942 ha existed within the mine lease area. The Project Proponent also informed the EAC that the State Govt. during the auction has informed that the old excavated areas shall be excluded during the grant of mining lease and accordingly mining plan was prepared by excluding the area of 1.942 ha and the same was approved by Indian Bureau of Mines vide letter dated 27.07.2023.

Further, the Project Proponent has shown the 7.5m barrier all around the mine lease boundary. The Project Proponent has also shown the two patches of the Charagah land, Govt. land and crematorium ground within the mine lease area and informed the EAC that the Charagah land of 8.4115 ha will be surrendered upon execution of the mine lease deed. The Project Proponent also informed the EAC that there are village roads passing through the mine lease area. Existing roads are proposed to be diverted in future and discussions are happening with the local people. After that, the matter will be pursued with the State Govt. to provide an alternate road at the cost of the Project Proponent. High Tension Line passing from NE-SW direction of the area of the Block will not be disturbed during the mining operation as it is falling outside the proposed Ultimate Pit Limit (UPL). LT lines may be re-aligned outside the UPL, if required at the time during advancement of mining operations. Habitations are also existing within the mine lease area. Scattered Habitation of village Devgaon & Minon Ki Dhani falling within the UPL will be shifted.

The Project Proponent has informed the EAC that the G2 level exploration has been completed and within 1st three years of mining plan period, exploration program will be completed. Backfilling has been proposed to start in the 10th years as per current exploration program and may change subject to detailed exploration. The Project Proponent has shown the conceptual plan. The EAC noted that the Project Proponent has proposed to achieve maximum production of 3.0 MTPA in the 10th year. The production has been kept low considering the land acquisition process. However, the

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mining plan will be modified in future depending upon the progress of the land acquisition. At the conceptual stage, an area of 223.19 ha will be excavated, out of which 64.59 ha will be converted into water reservoir, 123.14 ha will be backfilled and an area of 35.46 ha will be developed under bench plantation. An area of 178.70 ha will be developed under Greenbelt & Plantation at Conceptual Stage. Topsoil will be utilized for greenbelt/plantation and OB/Waste generated during plan period will be utilized for formation of the bund along the various safety zones liked road, village etc. and also for road maintenance and during conceptual stage will be used for backfilling in 123.14 ha of exploited pit area.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Dalmia Cement (Bharat) Ltd. for proposed Gothra Parasrampura East Block (Auctioned Block) with Limestone Production Capacity 3.0 Million TPA, OB 10.3191 Million TPA, Soil 1.271537 Million TPA (Total Excavation 14.590637 Million TPA) along with installation of Crusher 1000 TPH with Screen/Wobbler in the mine lease area of 460.4006 ha, located at Villages: Devgaon, Shivnagar, Naya Parasrampura, Gothra, Chaudhani, Khojas & Bhojnagar, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The Project Proponent needs to submit the Biodiversity Conservation Plan to ensure no net loss to biodiversity (Shakambari Conservation Reserve: 9.3 km SE).
- ii. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- iii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
- iv. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

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- v. The Project Proponent needs to submit the site specific measures to protect the surface features in the mine lease area and in the vicinity of the mine lease area and also to submit the map demarcating the surface features and their safety distances left as per mines acts and rules.
- vi. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- ix. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity of the proposed mine, existing mines, cement plant and other operating mines including the transport scenario in the study area and also should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters and data used for each activity of the modeling also needs to be submitted at the time of appraisal of EC.
- x. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xi. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.

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- xii. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xiii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiv. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xvi. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xvii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.3 Nahardih-Maghaipur Limestone Block of M/s. Nalwa Steel & Power Limited with Limestone production capacity of 1.5 Million TPA, Topsoil: 0.075 Million TPA, Over Burden: 0.88 Million TPA (Total Excavation: 2.45 Million TPA) along with

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mobile crusher of 400 TPH in the mine lease area of 365.252 ha, located at Villages Pachari, Chhodia, Alesur, Maghaipur and Motimpur-Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh- [F.No: :IA-J-11015/38/2023-IA.II(NCM), Proposal No: IA/CG/MIN/449681/2023; EIA Consultant: M/s J.M. EnviroNet Pvt. Ltd.] – Terms of Reference (ToR)

The instant proposal is for mining of Limestone in Nahardih-Maghaipur Limestone Block of M/s. Nalwa Steel & Power Limited with Limestone production capacity of 1.5 Million TPA, Topsoil: 0.075 Million TPA, Over Burden: 0.88 Million TPA (Total Excavation: 2.45 Million TPA) along with mobile crusher of 400 TPH in the mine lease area of 365.252 ha, located at Villages Pachari, Chhodia, Alesur, Maghaipur and Motimpur-Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- ii. The mine lease area is located between Latitude: 21°25'39.33"N to 21°25'58.70"N and Longitude: 81°57'39.33"E to 81°58'37.92"E. The mine lease area falls under the Survey of India Toposheet No: 64G/15 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) was issued through e-auction process conducted by the Govt. of Chhattisgarh.	04.08.2022	Limestone	3 years	Govt. of Chhattisgarh	365.252

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	352.574 ha
Government land	12.678 ha (Grazing land: 3.211 ha)
Forest Land	-

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Total Mining lease area (MLA), Ha	365.252 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	RPR/Raipur/LST/1378/MP/2022-23
	Date	12.09.2023
	Mineral & (Major/Minor)	Limestone, (Major mineral)
	Mine Lease Area, Ha	365.252 ha
	Validity	5 years from the date of Mining Lease registration
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Excavation will be done by mechanized opencast method using drilling and blasting. DTH drills and wet drilling will be used to develop ecofriendly mining. Diameter of the blast hole drill will be 150 mm. The blasting will be done by ANFO/SME/Slurry as column charge and slurry /cast booster explosive as booster charge. Controlled blasting will be practiced by using Nonel to reduce sound, ground vibration, back break, fly rock within the safe limit. Hydraulic rock breaker will be used for breaking oversized boulders in place of secondary blasting. All precautions for blasting and safety measures will be taken at the time of blasting and will be carried out by qualified/certified blaster.	
Geological Reserves	122.22 Million Ton (As on 01/04/2022)	
Mineable Reserves	85.11 Million Ton (As on 01/04/2022)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 2.45 Million TPA <u>Breakup of Total Excavation:</u> 1. Limestone: 1.5 Million TPA 2. Top Soil: 0.075 Million TPA 3. Over Burden: 0.88 Million TPA	
Life of mine	60 years (As on 01/04/2022)	
Mine Bench Height & Bench Width	Bench height: 6.0 m (Maximum) Bench Width: 12 m (Minimum)	
No. of Mine Benches	6 benches at conceptual stage	
Existing Depth, m bgl	It's a greenfield project so not applicable.	
Ultimate Depth of Mining, m bgl	245 m AMSL (42 m bgl)	
Ground Water Table, m bgl	3- 5 m bgl	
Details of ground water intersection	Water table will be intersected during the working and necessary permission will be taken before intersecting ground water table.	

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Individual bench slope	80°
Overall pit slope	45°
Details of existing/ proposed Crusher	Mobile crusher of 400 TPH will be installed
Mineral Beneficiation	Nil
RoM output size	Nil
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by tippers via haul road and it will be transported to end users via Road and Rail.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ Total 0.07 million cu m of top soil will be generated during plan period which will be used in green belt generation. At the conceptual stage top soil generated will be used for Greenbelt and plantation. <u>Over Burden:</u> ➤ During this Plan period, 0.46 million cu m Over burden will be Stacked at earmarked place and fully utilized for backfilling. ➤ Approx 12.56 million cu m of overburden will be generated during conceptual stage and at the conceptual stage, OB generated will be used for backfilling excavated area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	110.0 KLD	Fresh Water	110.0 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump as and when developed		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be taken from State Govt. for using Ground water.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Pachari Village	~0.2 km in NW direction
Nearest Town	Kharora	~6.0 km in SW Direction
Nearest State/National Highway	NH -130 B	~4.0 km in SSE direction

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Interstate Boundary	None	-
Railway Station/Railway line	Tilda Railway Station	~20 km in NW direction
Water Bodies	Tangna Nala	~3.0 km in North direction
	Kumhari Tank	~4.5 km in WNW direction
	Banjari Nala	~9.0 km in NW direction
	Chitawar Nala	~5.5 km in NNE direction
	Khorsi Nala	~5.0 km in ENE direction
	Mahanadi Canal (Lowan Branch)	~4.5 km in SE direction
	ahanadi Canal (Baloda Branch)	~100 m in SSW direction
	Kosrangi Tank	~6.5 km in SSE direction
	Pindron Tank	~8.0 km in SSW direction
	Pikridih Tank	~8.5 km in WSW direction
School	Govt. New Middle School Chhadiya	~350 m in SW direction
Forest	Khulidabri Protected Forest	~3.0 km West direction
	Moheranga PF	~8.5 km in WNW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Certificate/letter from the concerned Department will be obtained during EIA study.
National Park	No	Certificate/letter from the concerned Department will be obtained during EIA study.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study will be carried out, if schedule - I Will found in the study area Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for greenbelt/plantation and no. of saplings proposed	Total estimated greenbelt area on lease boundary will be 11.250 ha. and total area under plantation will be 86.424 ha (42.370 ha on backfilled area and 44.054 ha on undisturbed

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	area).
Budget for green plant & plantation till the end of life of mine.	Rs 9.5 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	106
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	11.250 ha

x. Rehabilitation & Resettlement (R&R):

R & R details	➤ Total mine lease area is 365.252 ha, out of which 352.574 ha is private land. ➤ Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent has submitted a undertaking vide letter dated 16.10.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit bearing no: R835030 dated 19.10.2023 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 300 Crores
Employment	96 persons

3. Observation and Recommendation of the EAC:

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The Project Proponent has informed the EAC that the instant mine was granted under auction and letter for grant of mining lease was granted by the State Govt. vide order dated 04.08.2022. Mining Plan was approved by Indian Bureau of Mines vide letter dated 12.09.2023. The total mine lease area is 365.252 ha, out of which Pvt land is 352.574 ha and Govt. land is 12.678 ha (including Grazing land of 3.211 ha). The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the 11 KVA transmission lines within the lease area and informed that during the plan period, safety barriers will be left in both sides of transmission line and all the transmission line will be diverted progressively up to the conceptual stage. The Project Proponent also shown the roads passing through the mine lease area on northern side and on southern side and informed that during course of mining, roads will be diverted. A nalah passes within the central part of the mine lease area will be diverted. Mining activity will reach the nalah after 30th year. Mining is proposed to a depth of 42 m bgl. The depth of the nalah is less than 1m. The EAC opined that no nalah should not be disturbed/diverted. No habitations are within the mine lease area.

The Project Proponent has shown the year wise working plan in the KML file. Mining activity will start from the northern side of the mine lease area. Backfilling will be started in the 15th year. Waste Dump is proposed in the eastern side of the mine lease area and mobile crusher is proposed to be on the western side of the mine lease area during the mining activity on northern side and then will be shifted to on the eastern side as the mining activity progresses from north to south. The maximum land is a private land within the mine lease area and land will be purchased with negotiation. Grazing land of 3.211 ha exists within the mine lease area and an alternate land will be provided. An area of 25 ha has been already purchased outside the mine lease area. An alternate land for grazing will be provided within the area of 25 ha. Under 25 ha, a provision has also kept to provide land for land compensation. Purchasing of land is in process and already negotiation has been done with the local people for purchasing about 145 acres of land. The EAC opined that while purchasing the land, the Project Proponent needs to consider the area from which the mining activity will progress, location of crusher, waste dump etc.,

The Project Proponent has informed the EAC that schools are located adjacent to the mine lease area. The strength of the nearest school is 121. During initial 10 years of mining operation, the mining activity will be 500m away from the school. The Project Proponent also informed the EAC that it is a non-captive mine and the mineral will be transported byroad. A length of 2.5 km connecting to the Highway from the mine lease area will be developed as a separate road away from the village. The EAC opined that the Project Proponent needs to explore the possibility of utilizing the power from the solar energy. At the conceptual stage, an area of 309.948 ha will be excavated, out of

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which 267.578 ha will be converted into water reservoir and an area of 42.370 ha will be backfilled. Topsoil generated during plan period will be used in green belt development and during conceptual stage will be spread over the backfilled area and also will be used in plantation. Over burden will be stacked at earmarked place and fully utilized for backfilling.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s. Nalwa Steel & Power Limited for Nahardih-Maghaipur Limestone Block with Limestone production capacity of 1.5 Million TPA, Topsoil: 0.075 Million TPA, Over Burden: 0.88 Million TPA (Total Excavation: 2.45 Million TPA) along with mobile crusher of 400 TPH in the mine lease area of 365.252 ha, located at Villages Pachari, Chhodia, Alesur, Maghaipur and Motimpur-Khurd, Tehsil: Kharora, District: Raipur, Chhattisgarh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects: -

- i. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- ii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
- iii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- iv. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- v. The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.

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- vi. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- vii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- viii. The Project Proponent needs to submit the site specific measures to protect the surface features in the mine lease area and in the vicinity of the mine lease area and also to submit the map demarcating the surface features and their safety distances left as per mines acts and rules.
- ix. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- x. The Project Proponent needs to explore the possibility of utilizing the power from the solar energy.
- xi. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

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- xiii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xvi. The project proponent needs to look into the diameter of the drill holes and spacing burden in respect with the bench height.
- xvii. The Project Proponent needs to submit the layout of crusher plant and measures to be adopted to reduce dust and noise.
- xviii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.4 Limestone mining project of M/s Mangalam Cement Ltd for proposed production capacity of 32,08,690.3 TPA (ROM) Saleable Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA in the mine lease area of 323.332 ha, located near Village- Kathiya - Pachri, Tehsil- Tilda, District- Raipur, Chhattisgarh – [F.No: IA-J-11015/35/2023-IA.II(NCM), Proposal no: IA/CG/MIN/444676/2023; EIA Consultant: M/s Cognizance Research India Private Ltd.] – Terms of Reference (ToR)

The instant proposal is for Limestone mining project of M/s Mangalam Cement Ltd for proposed production capacity of 32,08,690.3 TPA (ROM) Saleable Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA in the mine lease area of 323.332 ha, located near Village- Kathiya - Pachri, Tehsil- Tilda, District- Raipur, Chhattisgarh.

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2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- ii. The mine lease area is located between Latitude: 21°27'27.50766"N to 21°28'21.22912"N and Longitude: 81°54'57.38042"E to 81°56'52.53573"E. The mine lease area falls under the Survey of India Toposheet No: 64G/15 and falls in Seismic Zone-II.

iii. Details of Mine Lease:

Sr. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral&(Major /Minor)	Period of Grant	Granted by	Mine lease area in Ha.
1	LoI No- F 3-04/2021/12, Nava Raipur, Atal Nagar,	04/08/2022	Limestone (Major Mineral)	3 Years	Joint Secretary Chhattisgarh Government Mineral Resources Department New Raipur	323.332

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	250.647 Ha.
Government land	72.685 Ha.
Forest land	Nil
Total Mining lease area (MLA), ha	323.332 Ha.
Private land for crusher, workshop & other infrastructure outside the MLA	Nil (Not Proposed)

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	RPR/RAIPUR/LIMESTONE/1381/MP/2023-24
	Date	14/07/2023
	Mineral & (Major/Minor)	Limestone (Major Mineral)
	Mine Lease	323.332

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	Area, Ha.	
	Validity	5 Year from date of agreement
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Mechanized Mining	
Drilling/Blasting	Deep Hole wet Drilling & Blasting Diameter of hole – 110 mm, Depth of hole= 6.0m Explosive required per month = 75,000 kg	
Geological Reserves	21,17,79,706.0Tonnes	
Mineable Reserves	16,54,51,198 Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Total Excavation 32,08,690.3 TPA (Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA)	
Life of mine	50 Years from the date of registration.	
Mine Bench Height& Bench Width	Mine Bench Height 6m & Bench Width 15m	
No. of Mine Benches	3 benches (during plan period)	
Existing Depth, m bgl	Highest - 297mRL Lowest- 288mRL	
Ultimate Depth of Mining, m bgl	63 mbgl	
Ground Water Table, m bgl	Water Table 261mRL (27 mbgl Post monsoon) 258mRL(30 mbgl Pre monsoon)	
Details of ground water intersection	Proposed Mining depth is only 18mbgl, so there will no water intersection in next five years.	
Individual bench slope	60°	
Overall pit slope	37°	
Details of existing/ proposed Crusher	Not proposed	
Mineral Beneficiation	Not proposed	
RoM output size	0.5m ³ (max.)	
Transportation details including capacity of dumper/tipper, mode of transport and distance	Mode of transportation = Dumpers Number of Dumpers = 5 Capacity of Dumper =25 Tonner Lead Distance = 2 km	
Generation of Topsoil/OB & its Management during plan period & conceptual period	Top soil generated during plan period = 4,91,892.8tonnes (3,51,352 m ³) Top soil generated during conceptual period = 74,16,598tonnes (5,297,570 m ³) Top soil shall be Utilized for plantation.	
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	No mineral waste and reject shall be generated during plan period.	

vi. Water requirement:

Total water requirement	71.0 KLD	Fresh water	4.0 KLD
		Treated water	67.0 KLD
Source	Water for Drinking & Domestic shall be taken by Govt.		

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	Supply and nearby villages Kathiya. Surface water accumulated in the existing pit shall be used for dust suppression and plantation.
Permission for withdrawal/ intersection along with details of grant and its validity	Permission of water intersection shall be taken before intersection of ground water table.

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Village	Kathiya - Pachri	Kathiya 0.40 km in North direction. Pachri 0.70 km in SE direction
Town	Tilda	14.85km in NW direction
Highway	NH-130B TildaSimga Road	7.30 km in South direction 3.827 km in SW direction
Interstate Boundary	Nil	Nil
Railway Station/Railway line	Tilda Railway station	About 15.85 km in NW direction
Water Bodies	Pond, Pachri Pond, Kumhari Tank Keotara Pond, BharuwadihKalan NaiyaTalab, Mohra Pond, Pindraon Tank Pond, Jara Pond, Kesla JamuniyaNala TangnaNala KhorsiNala Pond, Parsada BanjariNala	(About 207.52 meter in SE direction) (About 314 meter km in NW direction) (About 0.51 km in West direction) (About 4.35 km in NE direction) (About 6.013 km in SW direction) (About 6.55 km in NE direction) (About 6.60 km in SE direction) (About 7.00 km in West direction) (About 7.60 km in NE direction) (About 7.75 km in SE direction) (About 8.30 km ion SE direction) (About 8.45 km in North direction)
Forest	Khaulidabri Protected Forest Mohrenga Protected Forest	About 643.40 m in SW direction About 3.827 km in SW direction

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	-No-	-

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National Park	-No-	-
Wildlife Sanctuary	-No-	-
Elephant/Tiger Reserve	-No-	-
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	-No-	-
Coastal Regulation Zone (CRZ)	-No-	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Will be submitted with EIA/EMP if Applicable	-
Wildlife Conservation Plan	Will be submitted with EIA/EMP if Applicable	-

ix. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Proposed area of green belt - 2.67 ha per year. No. of Sapling proposed per year = 2668
Budget for green plant & plantation till the end of life of mine.	INR 26,68,000 per year, INR = 10,67,20,000 at the end of life of mine.
Budget for nursery	Nil
Details of existing plantation and its survival rate	Number of existing trees -950 survival rate 90%
No. of tree cuts in the mine lease area and compensatory afforestation	950 tree cuts at the end of life of mine
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	6.95 hectare statutory barrier & 20.60 hect. Non mineralized area.
50 m safety zone of nallah, roads, electric lines	Both side of road -79.17 hect.

x. Rehabilitation & Resettlement (R&R): -

R & R details	Rehabilitation and Resettlement (R&R) is not involved in this project.

xi. Court case details: -

Court Case, No and its present status	The Project Proponent has submitted an affidavit dated 02.11.2023 stating that there is no litigation pending against the project and/or land in which the project is proposed to be set up and that for any such litigation whatsoever, the sole responsibilities will be borne by the Project Proponent.
Undertaking by Project Proponent w.r.t court case	

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- xii. The Project Proponent has submitted the Affidavit dated 02.11.2023 stating that there is no violation of provisions of EIA Notification dated 14.09.2006 and amendments made thereafter, circulars and OM issued thereunder.

- xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 162.46Crores
Employment	120persons

3. Observation and Recommendation of the EAC:

The Project Proponent/Consultant presented the KML file to indicate the site features in the mine lease area and in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and informed the EAC that the total mine lease area is 323.332 ha. A State Highway is passing adjacent to the mine lease area on north eastern side. A Protected Forest is located on the south western side of the mine lease area. A water body is located at a distance of 0.3km on north western side of the mine lease area. A kuttcha road is passing within the mine lease area. A poultry farm is located within the mine lease area. No habitations are found within the mine lease area. The EAC noted that there are old pits existing in the mine lease area. The Project Proponent has informed the EAC that the lease area mostly comprises of Private land of 250.647 ha and Govt. land of 72.685 ha.

The EAC asked about the evacuation route of the mineral. The mined out mineral will be transported to the Cement plant around 10 km radius by State Highway. Width of the road is found to be 30 ft. A cement plant is also planned to propose on the north western side of the mine lease area. Ground water will be intersected during the working and necessary permission will be taken before intersecting ground water table. The Project Proponent has informed the EAC that the instant mine was granted under auction and letter for grant of mining lease was granted by the State Govt vide order dated 04.08.2022. Mining Plan was approved by Indian Bureau of Mines vide letter dated 14.07.2023. No National Park, Wildlife Sanctuary, ESA/ESZ is found within 10km radius of the study area. The EAC asked the Project Proponent to increase the no. of saplings proposed. The EAC noted that in common application form, the Project Proponent has inadvertently mentioned that the crusher is proposed to be installed within the mine lease area and also noted that the crusher is not a part of the proposal as per approved mining plan. The EAC asked about the location of the crusher. The Project Proponent has informed the EAC that crusher is proposed to be located in the Cement Plant.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA

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Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Mangalam Cement Ltd for proposed production capacity of 32,08,690.3 TPA (ROM); Saleable Limestone: 29,69,287.5 TPA, Top Soil: 2,39,402.8 TPA in the mine lease area of 323.332 ha, located near Village-Kathiya - Pachri, Tehsil- Tilda, District- Raipur, Chhattisgarh for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries at the time of submission of EC proposal.
- ii. The Project Proponent needs to provide the exact breakup of total excavation including Production/ROM, Mineral Rejects, Topsoil, OB, Waste per year in first five year plan period.
- iii. The Project Proponent needs to submit the map and the details regarding alternate land for grazing land and also its protection measures.
- iv. The Project Proponent needs to submit the distance of the Ultimate Pit Limit from the Poultry farm. A detailed note on how the Project Proponent shall ensure that the mining activity will not have impact on the poultry farm inside the mine lease area shall be submitted. The Project Proponent also needs to explore the possibility of shifting the poultry farm along with the timeline and cost.
- v. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- vi. The Project Proponent needs to address the impacts and mitigation measures arising out of the mining activity to nearby water bodies in the vicinity of the mine lease area.
- vii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

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- viii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- ix. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- x. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xi. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.
- xii. The Project Proponent needs to increase the no. of saplings proposed. The Project Proponent also needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xiii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

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- xiv. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xvi. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Chhattisgarh during the appraisal for EC, clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s Mangalam Cement Ltd or not?
- xvii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.5 Amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for 2 years w.e.f. 23.01.2024, located in Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand – [F.No: J-11015/251/2009-IA-II(M), Online Proposal No: IA/JH/MIN/445601/2023; EIA Consultant: M/s MECON Limited] – Amendment in EC

The instant proposal is for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for 2 years w.e.f. 23.01.2024, located at Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.
- ii. Details of previous Environmental Clearance (EC):
 - a) Initially, the Project Proponent has obtained Environmental Clearance on 24.01.2012 for Dhobil Iron Ore Mining Project for production capacity 0.75 MTPA of Iron Ore over an area of 513.036 ha.

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- b) Then, the Project Proponent obtained amendment in EC on 01.05.2012 w.r.t specific condition no (v) stating that *“Necessary wildlife clearance, as applicable, shall also be obtained”*.
- c) Further, the Project Proponent has obtained amendment in EC on 19.04.2017 to the effect that transportation of Iron ore is allowed for further 5 years w.e.f 23.01.2017 onward through road with the condition that the project proponent will put in place the conveyor system for transportation of Iron ore within 5 years.
- d) Again, the Project Proponent obtained amendment in EC on 04.04.2022 for continuation of iron ore transportation through road for another 2 years w.e.f 23.01.2022 located in Village Dhobil, Tehsil Manoharpur, District West Singhbhum, State Jharkhand. If Project proponent does not stand upto the commitment provided vide letter dated 19.03.2022, the production may get curtailed to minimise the air pollution due to transportation of ore through trucks.
- iii. Now, the Project Proponent has requested for amendment in EC dated 24.01.2012 for continuation of iron ore transportation through road for 5 years w.e.f. 23.01.2024.
- iv. Justification for amendment in EC:
 - a) The Project Proponent has submitted that the Manoharpur Ore Mines (MOM), Chiria consist of six mining leases i.e. Ajitaburu, McLellan, Ankua, Tatiburu, Sukri-Lutur & Dhobil. Dhobil Iron Ore Mining Leasehold area under Monoharpur Ore Mines, Chiria covering an area of 513.036 ha is located in West Singhbhum District of Jharkhand and falls entirely within Ankua Reserve Forest (R.F.) of Saranda Forest Division. At present only Dhobil is in operation.
 - b) Iron Ore from Dhobil mines is transported by road (~31 km) to the railway siding situated at Manoharpur and loaded into railway wagons for dispatch. The 31 km long route through which the ore is trucked to Manoharpur Railway Siding comprises of forest road, State Highway No. 4 (SH4) and the connecting road from SH4 to the railway siding.
 - c) For development of Manoharpur Ore Mines, Stage-I FC over an area of 595.075 ha for Manoharpur Group of Mining Leases (2376.122 ha) was granted by MoEFCC on 07.03.2011. Post approval of Management Plan for Sustainable Mining (MPSM), MoEFCC sought some information on 10.08.2018, which was submitted by Govt. of Jharkhand on 07.06.2019. However, grant of Stage-II FC for an area of 595.075 ha is pending with MoEFCC, due to No-Mining Zone issue of Management Plan for Sustainable Mining (MPSM) of Saranda Forest Division.
 - d) Accordingly, for evacuation of iron ore from Manoharpur Group of Mining Leases, the proposal for diversion of 14.88 ha of forest land for installation of LDBC was submitted online on 31.01.2017. The proposal was considered by REC, MoEFCC, Ranchi on 11.03.2019. However, grant of FC over 14.88 ha is pending due to No-Mining Zone issue of MPSM.

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- e) Though the mining leases under Manoharpur Ore Mines are falling within the No mining Zone of MPSM, however MoEFCC, New Delhi has permitted mining only within already broken area of Dhobil lease as an exception. Forest Clearance was obtained vide Lr No. 8-20/98-FC dated 21.10.1998 under section-2 of Forest (Conservation) Act, 1980 for diversion of 29.411 ha of forest land (already broken up area). At present all mining and allied activities are confined within broken area only.
- f) The grant of above forest clearances are yet to be resolved which is beyond the control of SAIL. In order to ensure uninterrupted supply of iron ore to SAIL Steel Plants and also to enable SAIL-BSL to contribute to the socio-economic development of region, continuation of ore transportation through road for 5 years w.e.f. 23.01.2024 from Dhobil Lease to Manoharpur Railway Siding is very much essential.
- v. Details of Mine Lease:
 - a) The Project Proponent has submitted that the Govt. of Jharkhand vide letter dated 07.03.2018 have renewed the 2nd renewal period of Dhobil lease from 08.03.1998 to 07.03.2018 (20 years) and further extended the period of mine lease from 08.03.2018 to 07.03.2038 (20 years) as per Mineral (Mining by Government Company) Rules, 2015. Subsequently, lease deeds for both the periods were executed on 21.04.2018.
- vi. Mining Plan:
 - a) The Project Proponent has submitted that the Review of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM) vide Letter No. RAN/WSB/Fe/MP-10/2021-22 dated 15.11.2021 in respect of Dhobil lease area of 513.036 Ha. The approval is given for the received proposals as applicable from this date for the mining activities to be carried out within the extended area of 29.411 ha.
- vii. Forest Clearance:
 - a) The Project Proponent has submitted that the entire mine lease area of 513.036 Ha is a forest land. Forest Clearance was obtained vide Lr No. 8-20/98-FC dated 21.10.1998 under section-2 of Forest (Conservation) Act, 1980 for diversion of 29.411 ha of forest land (already broken up area).
- viii. Environmental Status:
 - a) The Project Proponent has submitted that the present Environmental status was analyzed on the basis of baseline environmental data generated for one month during April - May, 2023 by Environmental Engineering Laboratory of MECON Ltd. (a Govt. of India U/T under the Ministry of Steel). The data includes micro-meteorological conditions, ambient air quality (11 locations), noise levels (11 locations), water quality (Groundwater: 2 locations and Surface water: 8 locations) and traffic density (4 locations). The collected data has been analysed

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in detail for identifying, predicting and evaluating the environmental impacts due to continuation of existing road transportation of Dhobil Iron Ore Mine.

- b) The Project Proponent also submitted that the baseline data levels show that the contributions due to the continuation of ore transportation through road will have insignificant impact on the existing ambient air quality. The environmental monitoring carried out by SAIL within the nearby areas revealed that the air, noise and water quality in and around the mines are well within the respective standards. The traffic studies revealed that the entire ore transport road is capable of handling the ore transport from Dhobil Iron ore mine with adequate buffer capacity. Once the covered conveyor is commissioned, ore transport from Dhobil Mines to Manoharpur siding shall be carried out exclusively through covered conveyor.
- ix. Certified Compliance Report (CCR):
- a) The project was monitored for ascertaining compliance to the conditions stipulated in the environmental clearance by the Regional Office of this Ministry at Ranchi on 03.08.2021, which has submitted their reports to Ministry vide letter No. 103- 356/12/EPE/4911 dated 27.09.2021. The report has been examined by the Ministry.
- b) A letter seeking ATR/clarification on the observed non-compliance was issued to M/s. Steel Authority of India Limited (SAIL) by Ministry vide letter no. IA-J-11014/53/2021-IA-I dated 01.12.2021 for which M/s. Steel Authority of India Limited (SAIL) submitted a response vide letter dated SAIL/MOM/EC/2021-22/449 dated 17.01.2022.
- c) IRO, Ranchi provided their observations on the Action Taken Report (ATR) submitted by M/s. Steel Authority of India Limited (SAIL) vide letter No. 103-356/12/EPE/061 dated 21.01.2022. The report has been examined by the Ministry and it was observed that there is still substantive non-compliance of environmental conditions contained in said EC letter No. J-11015/251/2009-IA II (M) dated 24.01.2012 and the same are as enlisted below:
- (i) STP has not been installed in the Colony. (Specific Conditions: xxvii)
 - (ii) Mining technology and scope of working has not been followed without prior approval of the Ministry of Environment & Forests. (General Conditions: i)
- d) The existing operations at Dhobil ML have been inspected by the IRO, MoEF&CC, Ranchi on 17.01.2022 and reported as follows:

Observation by Integrated Regional office, Ranchi MoEF&CC, report date 27.09.2021.	Integrated Regional Office Ranchi MoEF&CC on the basis of site inspection dated 17.01.2022 and action taken reports and other documents submitted by Project proponent.

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i. In the EC it was mentioned that "No crushing plant is proposed as part of this project". However, two mobile crushing units were observed in the mine project during inspection. PP should explain the reasons for above deviation from the EC.	Two crushing units were observed in the mine project during inspection on 17.01.2022 PP has explained the reason for deviation from EC condition as can be seen in adjacent column. PP explains that "it was envisaged to development common crushing plant of 7.0 MTPA capacity in Ajitaburu leasehold for crushing of ROM from Dhobil, Ajitaburu MClelan and Sukri Luturburu leases of Manoharpur Ore Mines. Due to delay in Forest Clearance for Ajitaburu lease common crushing plant could not be installed as envisaged. To fulfill the crushing requirement mobile crushing units were installed in the Dhobil mine", Final decision on the compliance of this condition may be taken by MOEF&CC. New Delhi.

- e) As explained above, till date no mining operations and the envisaged Common C&S Plant for sizing of the ore from all the four MLs as per the EC grant order at Ajitbura ML could not be installed till date for want of Stage-II FC from MoEF&CC Accordingly, the existing mining operations at Dhobil ML is being continued without changing any mining technology and scope of the work since grant of EC dated 24.01.2012. Therefore, the Project Proponent requested to consider their submission and to withdraw the Show Cause Notice dated 17th May, 2023 issued under Section 5 of Environment (Protection) Act 1986 w.r.t Dhobil Iron Ore Mining Project of SAIL.
- f) The Compliance & Monitoring Division of this Ministry vide letter dated 17.05.2023 issued Show Cause Notice under section 5 of Environment (Protection) Act, 1986 to Dhobil Iron Ore Mining project of M/s SAIL.
- g) The Project Proponent has submitted their response to the Show Cause Notice dated 17.05.2023 to the Ministry vide letter dated 12.06.2023.
- h) The Project Proponent has submitted the Certified Compliance Report (CCR) issued by the Regional Office (RO) vide letter dated 12.09.2023 for the EC's dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022. Site Inspection was conducted by RO on 28.07.2023. Non-Compliances were observed by RO w.r.t non-installation of STP/ETP, density of the plantation, solar powered electric fencing and change in mining technology.
- i) Then, the Project Proponent has submitted the action taken report to the Regional Office on 21.09.2023 for the non-compliances identified by RO.

x. Past Production details:

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- a) The Project Proponent has submitted the certified past production details issued by the District Mining Officer vide letters dated 08.11.2014, 29.10.2021 and 06.05.2023 for the period 1993-94 to 2022-23.

Financial Year	Certified ROM Production (Metric Tonnes)
1993-94	66,616.73
1994-95	92,974.45
1995-96	68,261.58
1996-97	1,55,183.40
1997-98	97,722.10
1998-99	1,02,940.60
1999-00	1,42,564.90
2000-01	3,36,994.50
2001-02	2,82,810.00
2002-03	2,73,463.30
2003-04	3,00,328.70
2004-05	3,11,058.70
2005-06	4,38,590.00
2006-07	7,90,127.20
2007-08	9,64,527.00
2008-09	5,58,748.98
2009-10	6,83,968.00
2010-11	3,05,035.00
2011-12	3,48,855.00
2012-13	4,43,187.01
2013-14	4,08,964.48
2014-15	3,27,029.83
2015-16	4,50,784.89
2016-17	5,55,166.07
2017-18	4,43,592.69
2018-19	7,29,308.48
2019-20	7,33,794.93
2020-21	5,53,841.03
2021-22	75,251.75
2022-23	3,41,182.29

xi. Details of Violation/Court Cases:

- a) The Project Proponent has submitted that with regard to the allegations of excess production prior to the grant of the EC, MoEFCC has communicated the violation of Environment (Protection) Act 1986 occurred at the Dhobil Iron Ore Mine vide letter No.- J-11015/251/2009-IA(II).M dated 20.04.2011 that the production from the mine was enhanced without obtaining the requisite Environmental Clearance as required under EIA Notification, 2006. Based on this, criminal proceedings were initiated by the JSPCB as well as the resolution

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was passed based on the specific direction of MoEFCC on 20.04.2011. Recently, the case has been disposed-off on 24.04.2023.

- b) Subsequent to the final judgment dated 02.08.2017 of Hon'ble Supreme Court of India in the matter of Common Cause (i.e., Unlawful mining in Odisha), the Government of Jharkhand has issued the Demand Notice to SAIL – Dhobil Iron Ore Mines vide demand Letter No. 1352/M dated 07.09.2017 amounting to Rs. 228,13,04,898/- towards recover price of mineral produced without or beyond the EC capacity for payment on or before 31.12.2017.
- c) In order to mitigate the risk of closure of Dhobil Mining Lease beyond 31.12.2017, M/s SAIL filed a Writ Petition bearing No. 7016 of 2017 – Steel Authority of India Ltd Vs. State of Jharkhand &Ors. before the Hon'ble High Court of Jharkhand at Ranchi on 04.12.2017.
- d) An amount of Rs. 199.84 Cr. was paid by SAIL to Government of Jharkhand under protest prior to 31.12.2017 to avoid the stoppage of mining operations.
- e) On subsequent hearings, the Hon'ble High Court vide order dated 21.02.2018 referred the matter to the Division bench of the Jharkhand High Court since it involves substantial questions of Law. The Hon'ble High Court also directed that during the pendency of writ petition transit challans for the petitioner companies shall not be stopped until the interim orders passed by this Court are varied, modified or recalled. The matter is sub-judice before the Division Bench of the Hon'ble High Court of Jharkhand.
- f) Further, the Project Proponent has also submitted the Affidavit in a non-judicial stamp paper of Rs. 20 bearing dated 24.06.2023 stating that Manoharpur Ore Mines (Dhobil Mining Lease -513.036 Ha.) of SAIL -Bokaro Steel Plant shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No.114 of 2014 in the matter of Common Cause versus Union of India and Ors, subject to the result of the pending Writ Petitions before Hon'ble High Court of Ranchi further appeals thereto if need arises.

3. Observation and Recommendation of the EAC:-

The Project Proponent has informed the EAC that the instant proposal is for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project for continuation of iron ore transportation through road upto Manoharpur Railway siding for a period 5 years w.e.f. 23.01.2024. The Project Proponent also informed the EAC that there is no change in existing scenario. Presently, the mineral is being transported from Dhobil Iron Ore Mining to Manoharpur Railway siding at a distance of 31 km by road. Due to non-availability of forest clearance, development of Manoharpur Ore Mines (595.075 ha) and installation of Long Distance Belt Conveyor (14.88 ha) has been held up. Mining activity is restricted to 29.411 ha of forest land (already broken up area) and FC is valid upto

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07.03.2038. Further, the Project Proponent has informed the EAC that in order to ensure uninterrupted supply of iron ore to SAIL Steel Plants and also to enable SAIL-BSL to contribute to the socio-economic development of region, continuation of ore transportation through road for 5 years w.e.f. 23.01.2024 from Dhobil Lease to Manoharpur Railway Siding is very much essential.

The EIA Consultant has informed the EAC that to assess the environmental status baseline data was collected for one month during April - May, 2023 by Environmental Engineering Laboratory of MECON Ltd. (a Govt. of India U/T under the Ministry of Steel). The traffic density was carried out at 4 locations. The present traffic volumes on all the roads are well within the respective capacities as per IRC:64. Predominant wind directions are from West followed by North direction. The air pollutant parameters are well within the NAAQS norms. The mean noise levels at all the ambient locations are well within the respective norms of the type of area. The Project Proponent has also shown the photographs of the air pollution control measures being implemented, plantation undertaken on waste dump, transport route, near office and surface water management structures.

The Project Proponent informed the EAC that the site Inspection was conducted by Regional Office (RO), MoEF&CC on 28.07.2023 and Certified Compliance Report (CCR) was issued by the RO vide letter dated 12.09.2023 for the EC's dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022. The PP submitted the action taken report to the RO on 21.09.2023 w.r.t non-installation of STP/ETP, density of the plantation, solar powered electric fencing and change in mining technology. Further, the Project Proponent informed the EAC, that, during inspection, RO was informed that No crushing plant was proposed as part of the instant project (Dhobil). However, crushing units were observed by the RO representative in the mine lease area during inspection and the same was report in Certified Compliance Report by RO Ranchi. The Project Proponent informed the EAC that a common Crushing & Screening units was proposed to be installed at Ajitaburu ML for size reduction of ore from all four ML including Dhobil ML. Accordingly, it was mentioned in EC grant Order of Ajitaburu ML dtd 31.03.2011 that *"It is proposed that an additional common crushing & screening plant of 7 million TPA will be established as part of this mine lease"*. Further, it was also mentioned in the preamble (Para - 4) of the EC grant Order of Dhobil ML dtd 24.01.2012 that *"No Crushing Plant is proposed as part of the project. It was committed by the proponent that ore transportation by road will be undertaken only for five years and thereafter it will be by conveyor only"*. With regard to above, PP further informed that in the EIA report, it was already mentioned that the details of the mining operations of Dhobil mining lease which states that blasted ROM will be fed to the mobile crushing and screening plant. The EAC noted the submission of the project proponent and observed that the use of mobile crusher till installation of common crushing unit as mentioned in the EIA report.

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The PP further mentioned that the Hon'ble High Court in WP (C) 7016 of 2017 vide order dated 21.02.2018 referred the matter (regarding demand notices issued in light of the Hon'ble Supreme Court judgement dated 02.08.2017) to the Division bench of the Jharkhand High Court since it involved substantial questions of Law. The Hon'ble High Court also directed that during the pendency of writ petition transit challans for the petitioner companies shall not be stopped until the interim orders passed by this Court are varied, modified or recalled. As on date the matter is sub-judice before the Division Bench of the Hon'ble High Court of Jharkhand. The Project Proponent has also informed the EAC that there is no change in configuration w.r.t mine lease area and production capacity. The existing road transport infrastructure is capable of handling the ore-transportation load from Dhobil Mines through the permitted transport road.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the road transportation may be permitted for 2 years considering the pollution load. The EAC also opined that the PP may continue using the mobile crusher and screening for sizing the ore before transportation of the same by road to the railway siding as mentioned by it in the earlier EIA report submitted during the grant of EC in the year 2012. The Committee also recommended that a field visit may be undertaken along with the pending visit of Kiriburu-Meghahatuburu Iron Ore Mines of Steel Authority of India Limited (SAIL) for real time appraisal on ground realities for facilitating the decision making in case of the instant project in near future. Based on the discussions held, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and its subsequent amendments therein; **recommended** the proposal for amendment in EC dated 24.01.2012 for Dhobil Iron Ore Mining Project (Capacity 0.75 MTPA ROM & ML Area-513.036 ha) of M/s SAIL - Bokaro Steel Plant for continuation of iron ore transportation through road for a period of 2 years w.e.f. 23.01.2024, located at Village Dhobil, Tehsil Manoharpur, Dist: West Singhbhum, Jharkhand along with the following additional specific conditions mentioned below: -

- i. This amendment in EC will be valid for a period of a 2 (two) years only w.e.f 23.01.2024.
- ii. Mining activity is restricted to an area of 29.411 ha for which the Stage-II Forest Clearance is available.
- iii. The Project Proponent shall convert the unpaved road into concrete road to reduce the fugitive dust.

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- iv. Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC.
- v. Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered with tarpaulin to prevent fugitive dust emission.
- vi. The Project Proponent shall maintain the entire mineral transportation route by road at their own cost. The Project Proponent shall also periodically maintain the roads to reduce the fugitive emissions from roads and also the vehicular emissions.
- vii. Regular sprinkling shall be done on roads to suppress the dust at the source.
- viii. The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
- ix. The Project Proponent shall undertake the dense plantation all along the haul roads and approach roads to attenuate the fugitive dust.
- x. As committed by the Project Proponent, modular type STPs shall be installed in place of Septic Tanks by March, 2024 with a provision to use the treated sewage for plantation.
- xi. To increase the density of trees, the Project Proponent needs to undertake the plantation in low density areas within the mine lease area.
- xii. The Project Proponent should follow-up the matter regarding solar powered electric fencing with DFO, Saranda to reach at a decision thereof.
- xiii. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- xiv. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed

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due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.

- xv. All other terms and conditions mentioned in the EC letter dated 24.01.2012, 01.05.2012, 19.04.2017 and 04.04.2022 shall remain unchanged.

2.6 Amendment in Environmental Clearance dated 04.06.2009 for Changes in Operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai), located in Matla Reserve Forests, Narainpur and Kanker District, Chhattisgarh – [F.No: J-11015/331/2006-IA.II(M), Proposal No: IA/CG/MIN/439531/2023; EIA Consultant: M/s MECON Limited] – Amendment in EC

The instant proposal is for amendment in EC dated 04.06.2009 for Changes in Operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai), located in Matla Reserve Forests, Narainpur and Kanker District, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and accordingly, appraised at the Central level.

- ii. Details of previous Environmental Clearance (EC):

Date of application	Proposal No	Consideration	Details	Date of accord
28.07.2007	IA/CG/MIN/8566/2009	-	Production of 14.0 MTPA of iron ore mining over a lease area of 883.22ha	04.06.2009
23.06.2009	-	-	Partial modification in EC letter dated 04.06.2009 and additional specific conditions were imposed	15.03.2010

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09.02.2017	IA/CG/MIN/ 8566/2009	February 20- 21, 2017	Transportation of 0.3 million TPA of ore from Rowghat M.L to Keonti by road and further onwards to Dalli Raihara/Bhilai through rail till 2021	08.06.2017
01.11.2021	IA/CG/MIN/ 236647/2021	30 th Nov - 3 rd Dec, 2021	Extension of validity of amendment in Environmental Clearance granted on 08.06.2017 for Rowghat Iron Ore mine Deposit F [ML area 2028.797ha and production capacity 14 million TPA] for transportation of 0.3 MTPA of iron ore from Rowghat ML to Keonti rail head by road and further onwards to Dalli Rajhara/Bhilai by rail located in Matla Reserve Forests, in Narainpur and Kanker District, Chhattisgarh for a period of another two (2) years i.e., till 31.12.2023	25.01.2022

- iii. Now, the Project Proponent has requested for amendment in EC dated 04.06.2009 for Changes in Operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant (Despatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai) as mentioned below:

S. No	Reference	Description	Existing	Amendment sought	Reason for amendment
1	Para 2 of Original EC 04.06.2009	Change in Process	14 MTPA Crushed Ore Disptached to downhill through 12 KM Conveyor length	2 MTPA Crushed and Screened Ore transport through Road from Hill Top from existing 0.3 MTPA	Downhill conveyor not installed due to non handing over of land by forest department
2	Para 2 of Original EC	Change in Process	14 MTPA Screening Ore transport through Rail from Rowghat Siding located	Total 2 MTPA Screened Material transport through Road Length 235 KM maximum upto Antagarh or Bhanuprtappur Siding till Dec'26 from existing 0.3	Railway siding not commissioned due to hindrances caused due to

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			at Foot Hill to Bhilai Steel Plant	MTPA upto Dec'23)	Left wing extremism Consequently delay in handing over of land by GoCG
3	Para 14 of Amended EC dated 25.01.2022	Amendment in Quantity and extension of time	0.3 MTPA transport through Road upto Keonti Siding validity upto Dec'23	Request for allowing dispatch through road @ 2.0 MTPA till Dec., '26 which includes: 1. @ 0.8 MTPA of iron ore up to Antagarh Railway Siding via Tadoki (direct route) 2. 1.2 MTPA up to Bhanupratappur/ Antagarh Railway Siding via Narainpur & Kanker (long route) and subsequently by rail to Bhilai. 3. In case of law and order problem along the Rowghat Mine to Antagarh Siding (direct route) as is often the case, the entire ore will be trucked to Bhanupratappur/Antagarh Siding via Narainpur & Kanker.	Railway Siding Commissioned only upto Antagarh Siding. Expected to reach Rowghat by Dec'25 and development of associated infrastructure by Dec'26

iv. The Project Proponent has submitted the mine lease deed was executed on 21.10.2009 and is valid for a period of 20 years. The entire lease area of 2028.797 ha is a Forest Land. Stage-II Forest Clearance was obtained vide letter no. F.No.8-44/2005-FC (Pt), dated 3rd Aug., 2009 for diversion of 883.22 ha of forest land.

v. The Project Proponent has submitted that the Rowghat Mine commenced mining operations only in late Feb., 2022. Prevailing micro-meteorological conditions, ambient air quality (14 locations), noise levels (14 locations) and water quality (Groundwater: 5 locations and Surface water: 5 locations), soil quality (6 locations) were assessed by carrying baseline environmental data generation for one month during May, 2023 (Summer Season). Traffic density on the proposed ore evacuation route was also studied.

vi. The Project Proponent has submitted the certified compliance report issued by the Sub Office, MoEF&CC vide letter dated 10.10.2023 for the EC's dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022. The site visit was

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conducted on 18.09.2023. Then, the Project Proponent has submitted the action taken report on 16.10.2023 to the Regional Office, MoEF&CC. The Ministry vide letter dated 02.11.2023 requested the Regional Office, Nagpur to submit the review report of the ATR submitted by Project Proponent. Then, the Project Proponent vide email dated 13.11.2023 submitted the revised and updated action taken report.

3. Observation and Recommendation of the EAC:

The Project Proponent has informed the EAC that the instant proposal is for amendment in EC dated 04.06.2009 for changes in operation of Rowghat Iron Ore Project of M/s SAIL's Bhilai Steel Plant for dispatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai. Initially, Environmental Clearance (EC) was obtained on 04.06.2009 for production of 14.0 MTPA of Iron ore. The ore is dispatched by rail to SAIL's Bhilai Steel Plant located at a distance of 185 km from the mine lease area. There has been delay in commissioning of rail link to Rowghat due to Left wing extremism activities and obtaining forest clearance. In this regard, amendment in EC dated 04.06.2009 has been sought to allow dispatch through road @ 2.0 MTPA till Dec.,2026 from the existing capacity of 0.3 MTPA by road. About 81% of the rail works has been completed upto Tadoki (77km) and the remaining work up to Rowghat will be completed by June, 2025 and it is expected to commission the Rowghat Station by Dec 2025 and associated linking infrastructure by Dec, 2026. The Bhilai Steel Plant is the sole producer and supplier for strategically important products to Indian Railways. The Bhilai Steel Plant is completely dependent on Rowghat Iron Ore mine and this project is an importance of national interest. The EAC noted the public complaints were received against the project and also in support of the project to increase their production capacity.

Then, the Project Proponent has presented the KML file and shown the boundary of the Rowghat mine lease area and informed the EAC that the entire mine lease area of 2028.797 ha is a Forest Land. Presently mining activity is being carried out in Anjarel block. The present proposal is to transport the ore of 0.8 MTPA from Rowghat to Antagarh Railway siding (~58km by road) via Tadoki (direct route) and 1.2 MTPA ore to Antagarh / Bhanupratappur Railway Siding (232 km/200km by road) via Narainpur & Kanker (long route). Due to law and order issue, the State Govt. has suggested to take the longer route via Narainpur & Kanker to reach Antagarh / Bhanupratappur Railway Siding. If the law and order issue exists via Tadoki route, the entire material will be transported through longer route as suggested by the State Govt. The Project Proponent also informed the EAC that the own RCC road of 7.5m width has been developed by the Project Proponent with an estimated budget of Rs 35 Cr from the foot

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hill of Rowghat to SH-5. Further, the Project Proponent has shown the photographs of the road developed by M/s SAIL, SH 5 between Tadoki & Antagarh, Road linking SH-5 with Antagarh Siding, Kondagaon bypass road, Kanker bypass road and SH 6 between Kanker & Bhanupratappur. Project Proponent also shown the photographs of Antagarh and Bhanupratappur Railway sidings and also the progress of the rail link.

The Project Proponent informed the EAC that the project is well equipped to produce 2.0 MTPA. Transportation will be outsourced and local people will be involved in transportation. The EIA Consultant has informed the EAC that the baseline data was generated during May, 2023. The ambient air quality stations (14 locations) were monitored in the mine lease and all along the transportation route. Noise levels at 14 locations were within the norms prescribed by CPCB. Surface water quality has been monitored at 5 locations and found to be suitable for drinking after conventional treatment and disinfection. Traffic density was studied on the transport route at 9 locations at hourly intervals. Additional load on the road will not have impact and the resultant concentration of PM_{10} due to transportation will be $\sim 91.14 \mu g/m^3$, $PM_{2.5}$: $\sim 47.1 \mu g/m^3$, SO_2 : $15.8 \mu g/m^3$ and NO_x : $25.26 \mu g/m^3$. The Project Proponent also detailed about the CSR activities being taken up. The Project Proponent has shown the certified past production details dated 06.07.2023 from the year 2020-21 to 2022-23. The Project Proponent has submitted the certified compliance report issued by the Sub Office, MoEF&CC vide letter dated 10.10.2023 for the EC's dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022. The site visit was conducted on 18.09.2023. Then, the Project Proponent has submitted the action taken report on 16.10.2023 to the Regional Office, MoEF&CC.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the dispatch of 2.0 MTPA (Maximum) of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai will be allowed in two phases for a period of two years i.e., 1.5 MTPA for a period of 6 months w.e.f 01.01.2024 to 30.06.2024 and 2.0 MTPA (1.5 MTPA + 0.5 MTPA) for a period of 18 months w.e.f 01.07.2024 to 31.12.2025 considering the pollution load due to transportation by road. The EAC also opined that meanwhile, the Project Proponent shall speed up the progress of the rail link. Based on the discussions held, the EAC in its meeting held during 14-15 November, 2023 under the provisions of EIA Notification, 2006 and its subsequent amendments therein; **recommended** the proposal for amendment in EC dated 04.06.2009 for dispatch of Maximum 2.0 MTPA of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to M/s SAIL's Bhilai Steel Plant from Rowghat Iron Ore Project [MLA:2028.797 ha] of M/s SAIL, located in Matla Reserve Forests, Narainpur and Kanker District, Chhattisgarh along with the following additional specific conditions mentioned below: -

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- i. This amendment in EC will be valid for a period of a 2 (two) years only w.e.f 01.01.2024.
- ii. The dispatch of 2.0 MTPA (Maximum) of Iron Ore by Road up to Antagarh Rly. Siding and / or Bhanupratappur Rly. Siding and then by Rail to Bhilai is allowed in two phases for a period of two years i.e., 1.5 MTPA for a period of 6 months w.e.f 01.01.2024 to 30.06.2024 and 2.0 MTPA (1.5 MTPA + 0.5 MTPA) for a period of 18 months w.e.f 01.07.2024 to 31.12.2025. Accordingly, State Pollution Control Board shall grant the Consent to Operate (CTO).
- iii. Mining activity is restricted to an area of 883.22 ha for which the Stage-II Forest Clearance is available.
- iv. The Project Proponent shall speed up the progress of the rail link and monthly progress/status along with the photographs shall be submitted to the Regional Office of MoEF&CC.
- v. Fugitive dust monitoring shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC.
- vi. The Project Proponent shall maintain the entire mineral transportation route by road at their own cost. The Project Proponent shall also periodically maintain the roads to reduce the fugitive emissions from roads and also the vehicular emissions.
- vii. Regular sprinkling shall be done on roads to suppress the dust at the source.
- viii. The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine. The wheel washing facility shall be integrated with complete recirculation system.
- ix. Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered to prevent fugitive dust emission.
- x. The Project Proponent shall undertake the dense plantation all along the haul roads and approach roads to attenuate the fugitive dust.

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- xi. The Project Proponent shall ensure that the additional traffic on the road in no way shall be hindrance to the public. Traffic marshal shall be deployed to ensure the safe movement of transportation.
- xii. The real time data generated by continuous ambient air quality monitoring stations (CAAQMS) should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- xiii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xiv. Periodical maintenance of surface water management structures has to be carried out to prevent and control the water pollution and soil erosion. The Project Proponent shall take adequate measures to prevent the washout of fines during monsoon season.
- xv. The Project Proponent shall undertake the gap plantation and shall plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting.
- xvi. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- xvii. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
- xviii. All other terms and conditions mentioned in the EC letter dated 04.06.2009, 15.03.2010, 08.06.2017 and 25.01.2022 shall remain unchanged.

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Additional Agenda:

2.7 Proposal for validity extension of Environmental Clearance granted for Rajashree Limestone Mine No.2 (Mine Lease Area – 400.70 Ha.) with expansion of limestone production capacity from 0.45 MTPA to 1.0 MTPA and installation of 400 TPH crusher by M/s UltraTech Cement Limited (Unit: Birla White) located at Villages: Basni, Tehsil: Merta, District: Nagaur, Rajasthan - [Proposal no: IA/RJ/MIN/213651/2021; File No. J-11015 /15/2015 IA.II (M); Consultant: Wolkem India Limited] - Site visit report

The Ministry vide letter dated 4.10.2021 accorded the extension of validity of EC for three years for Rajashree Limestone Mine No.2 (Mine Lease Area 400.70 Ha.) with expansion of limestone production capacity from 0.45 MTPA to 1.0 MTPA and installation of 400 TPH crusher by M/s UltraTech Cement Limited (Unit: Birla White) located at Villages: Basni, Tehsil: Merta, District: Nagaur, Rajasthan with following specific condition:

“After issue of extension of validity of Environmental Clearance for three years, it will be reviewed through the field/site visit by sub-committee of EAC at the end of two years”.

2. The term of two years ended on 3.10.2023. Accordingly, as per the request of the Project Proponent, Ministry constituted a sub-committee comprising of the following members:

1. Shri Niranjana Kumar Vasu, EAC Member
2. Shri Bandi Ramchandra Reddy, EAC Member
3. Shri Pankaj Verma Scientist E & Member Secretary, EAC (NCM), MoEF&CC
4. Shri Vidyasagar Jha, Research Officer, MoEF&CC
5. Shri Mahesh Purohit, Scientist-C, Sub Office Jaipur, MoEF&CC

3. The subcommittee was tasked to examine the recommendations made by EAC in its 31st EAC held during 9th to 15th June 2021. The members of the sub – committee that undertook site visit during 15-17 October 2023. The recommendation of the 31st EAC in verbatim is given as under: -

“Recommendation of the Committee:

After detailed deliberations made by the Project Proponent and the Consultant, the Committee Recommended the proposal for validity extension of Environmental Clearance for three years granted for Rajashree Limestone Mine No.2 (Mine Lease Area – 400.70 Ha.) with expansion of limestone production capacity from 0.45 MTPA to 1.0 MTPA and installation of 400 TPH crusher by M/s UltraTech Cement Limited (Unit: Birla White) located at Villages: Basni, Tehsil: Merta, District: Nagaur, Rajasthan with subject to submission in correction of form 6

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on PARIVESH portal and submission of an undertaking to clear all the backlog activities within three years and will demonstrate the efforts being made in the field of environmental restoration.”

4. Based on the aforesaid recommendation the project proponent submitted an undertaking dated 16.06.2021 stating the following:

1. We have taken sincere efforts for increasing plantation & improving the plant survival rate in 7.5 metre safety zone along the lease boundary.
2. As suggested by local DFO vide letter dated 09.12.2020, we have adopted RDF-I) Rehabilitation of Degraded Forest Scheme) plantation model (500 Trees per hectare) looking into the semi-arid climatic conditions and carried out green belt in 7.5 meter safety zone along the lease boundary in 8.5 hectare area except rocky outcrop area.
3. As advised by the Hon'ble committee during the 31st Meeting of the Expert Appraisal Committee (Non Coal Mining) held on 15th June 2021, we will try our level best to develop plantation in 7.5 meter safety zone along the lease boundary in rocky outcrop area in consultation with local DFO and some experts by adopting various technologies for plantation of species which can grow in rocky area and will also adopt other measures as suggested.
4. The progress and compliance status of the plantation will be submitted within 03 years time.
5. We humbly request committee to consider extending the EC validity for 05 years.

5. Beside above, the M/s UltraTech Cement Limited (Unit: Birla White) also submitted Compliance Report on Plantation along the boundary of mining lease area with the undertaking wherein following data was provided with regard to plantation till September 2020: -

S.No	Number of Trees planted	Number of Trees survived	Area (Ha)
1	8250	8097	8.50
2	36311	29149	29.50
Total	44561	37246	38

6. In the same document the project proponent submitted the Proposed Plantation Programme till the FY 2036 and the same is tabulated as under: -

S. No	FY	Area Covered (Ha)	No of Saplings to be planted	Dump (Ha)	Non Mineralized (Ha)	Backfilled area & Greenbelt (Ha)	Budgetary allocation (INR)
1	2019-21	11.00	11000	3.00	8.00	-	2800000

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2	2021-26	21.50	21500	6.50	15.00	-	7200000
3	2026-31	46.00	25000	9.00	25.00	12.00	7900000
4	2031-36	56.00	34000	6.00	25.00	25.00	9100000
Total		134.50	91500	24.50	73.00	37.00	27000000

7. Further while requesting for this instant site visit vide letter dated 26.09.2023, the Project Proponent has submitted the following: -

1. An approximate plantation of 11,000 trees in two years with survival rate of 90% and it has been done focussing the mine lease boundary & 7.5 m safety zone
2. A dedicated team of four members has been deputed for greenbelt development for better survival rate of plantation and take care of plants after plantation.
3. Also, private land holders of mine lease area are encouraged to adopt plantation by UTCL management, they are provided free fruit bearing and other plant species as suggested by DFO office with one year financial assistance towards plantation
4. Time to time guidance from the District Forest Department, Nagaur has been sought for tree species selection and method of plantation adoption, as advised RDF-I method of plantation keeping the local conditions in the mind with plantation density of 500 plants per hectare.
5. As per EC condition no. 2 plantation on safety zone of 7.5 meter has been done.
6. For increasing plantation and for improving the growth and survival rate of plants we engaged the NEERI to provide technology and support to achieve the targets.

8. In accordance with the order dated 03.10.2023; the sub-committee undertook the site visit during 15-17 October 2023. During the visit sub-committee observed the following: -

1. Sub-committee observed that M/s UltraTech Cement Limited (Unit: Birla White) is having surface rights in patched across the mine lease area. PP informed that out of total mine lease area of 400.7 ha, they have only obtained surface rights for 153.35 ha.
2. Sub-committee observed that boundary pillars/ boundary wall have been erected by the M/s UltraTech Cement Limited (Unit: Birla White) over the acquired lease.

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3. It was noted that efforts have been made by the M/s UltraTech Cement Limited (Unit: Birla White) to plant trees in the acquired lease area alongside the 7.5 m boundary and also in patches based on feasibility of plantation.
4. PP informed that since they do not have the surface rights alongside the mine lease they have done compensatory plantation in the aforesaid patches of land.
5. Sub-committee was observed that in some patches and stretches M/s UltraTech Cement Limited (Unit: Birla White) has successfully planted neem and other trees and their growth over the period of time has been adequate.



6. NEERI's interventions in the plantation programme of M/S UltraTech Cement Limited has not achieved the desired results in the absence of quality planting stock in terms of seedling quality as well as selection of species. They need to grow seedlings of appropriate height commensurate with healthy root stock for successful out-planting.

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7. It was also observed that M/s UltraTech Cement Limited (Unit: Birla White) was using tall and poor quality saplings having poor root growth as a result of which in most of the patches they have not grown well or died. M/s UltraTech Cement Limited (Unit: Birla White) informed that they have procured them locally from some agencies.



8. Sub-committee noted that the watering of plants needs to be more effective in terms of quantity of water, time of watering and maintenance of soil moisture in the root zone for a longer period. Models of in situ water harvesting around plants and water conservation may be adopted for better growth.
9. Sub-committee also noted that most of the mine lease acquired area was having a rocky terrain with a little or less availability of soil, arid climate and as reported by PP having annual rainfall less than 300 mm.

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9. Based on the aforesaid observation, the sub-committee recommended the following: -

1. M/s UltraTech Cement Limited (Unit: Birla White) should engage/take assistance from local institute of repute for planning and executing their plantation programme. The present scenario of plantation as observed by committee is inadequate and doesn't suffice the purpose and conditions mentioned in the Environmental Clearance.
2. M/s UltraTech Cement Limited (Unit: Birla White) may either develop their own nursery with the help of technical experts who are well experienced in growing plantation within the climatic conditions prevalent in the mine lease area or procure seedlings from reputed research nursery capable of raising seedlings for stress sites.
3. M/s UltraTech Cement Limited (Unit: Birla White) should plant only those saplings whose root system is properly developed commensurate with seedling height, it should plant more native species such as Acacia nilotica, Acacia Senegal, Azadirachta indica and other species tried and growing well on the stress sites in the region in consultation with the research institute and shall use proper planting techniques.
4. M/s UltraTech Cement Limited (Unit: Birla White) has made a lot of effort in plantation however due to lack of technical expertise they have made less progress. Hence PP should make a team of technical experts to monitor and implement the progress of plantation.
5. If required PP may transport and supplement soil suitable for seedling growth wherever required.
6. M/s UltraTech Cement Limited (Unit: Birla White) should widen and re-built the haul roads and should sprinkle water for dust mitigation
7. M/s UltraTech Cement Limited (Unit: Birla White) should follow scientific dumping of overburden and must construct garland drains and retaining walls
8. Since the progress has been slow, the sub-committee is of the opinion that PP should follow the recommendations made herein to expedite its plantation activity after next planting season in the area and the same should be confirmed by Regional Office through CCR in next 6 months.
9. In addition to existing plantation works being executed, Project Proponent shall also carry out survey all along the lease boundary and enumerate the standing vegetation in the safety belt. They shall pursue the land owners where surface rights are not there with the lease holder to allow raising of plantation in the safety belt wherever no standing vegetation is observed.

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10. Observation and Recommendation of the EAC: -

The EAC noted that the site visit was conducted by the subcommittee during 15-17 October 2023. The EAC deliberated on the observation and recommendations of the subcommittee. After detailed deliberations, the EAC agreed to the recommendations of the subcommittee.

2.8 Report of the field visit undertaken by EAC sub-committee during 29-31 October, 2023 at Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of Bicholim Taluka of North Goa District, Goa - [F.No: IA-J-11015/ 3/2023-IA-II(NCM), Proposal No: IA/GA/MIN/442593/2023] - Environmental Clearance (EC)

The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The total mine lease area is 478.5206 Ha, out of which Private land is 421.1153 Ha and Government land is 57.4053 Ha. The mine lease area is located between Latitude: 15°34'20.518"N to 15°36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.

3. The Directorate of Mines & Geology, Govt. of Goa vide letter dated 13.01.2023 granted the Letter of Intent (LoI) for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

4. Review and Mining Plan was approved by Indian Bureau of Mines, Goa vide letter dated 26.05.2023. Method of Mining will be Opencast mechanized mining without Drilling & Blasting. ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road.

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5. The Project Proponent obtained Terms of Reference (ToR) vide ToR letter dated 16.06.2023. Baseline data was carried out during March-May, 2023 (Summer Season). Public hearing was conducted on 07.07.2023. About 4708 written objections were submitted against the project and about 5183 no.s of letters were also received in support of the project. Budget of Rs 309.3 Lakhs has been earmarked to address the concerns raised during public hearing.

6. There are two habitations such as Mulgao and Lumgao and schools are located within the mine lease area. Asnora River is touching the mine lease boundary at one of the points and Mayem Lake is found at a distance of 0.46km from the mine lease area. Namuzgah/Ildgah is found within the mine lease area. A safety distance of 300m buffer has been left from Lamgao caves.

7. Mayem Forest Common Boundary with the mine lease area. Block-I Bicholim Mineral Block of Vedanta Ltd is not a part of any Eco Sensitive Area. The Schedule-I species such as Common leopard (*Felidae*) White-bellied Sea-Eagle (*Accipitridae*) Indian Peafowl (*Phasianidae*) and Crimson rose- Butterfly (*Papilionidae*) are found in the study area. Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023.

8. No Rehabilitation & Resettlement Plan is proposed during life of mine. There are three court cases pending against the project w.r.t auction. Total cost of the project is Rs 250 Cr. The Capital cost of EMP is Rs 72.0 Lakhs and about 716 no.s will get employment.

9. The instant proposal was earlier considered in the EAC (Non-Coal Mining) meeting held during 21-22 September, 2023 and the EAC after detailed deliberations opined that there is a need to ascertain the present scenario and ground reality with regards to handling of waste, settling ponds, location of waste dump w.r.t habitation, school and river, other surface features as forest (Mayem common boundary), temples, caves and fort, mineral transportation route and traffic congestion. The EAC was of the view that a site visit needs to be conducted by a sub-committee comprising of EAC Members and officers from MoEF&CC.

10. Accordingly, the Ministry vide letter dated 09.10.2023 constituted a sub-committee comprising of the following members to ascertain the ground realities of the project.

1. Shri Niranjana Kumar Vasu, EAC (Non-Coal Mining), Member,
2. Shri. Avijit Ghosh, EAC (Non-Coal Mining), Member,
3. Shri. Pankaj Verma, Scientist E & Member Secretary EAC (NCM), MoEF&CC,
4. Shri. Saurabh Upadhyay, Scientist C, MoEF&CC,
5. Shri Suresh Kumar Adapa, Scientist E, MoEF&CC, Bengaluru;

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6. Shri. A. Mohankumar, Consultant, MoEF&CC

11. The aforesaid committee undertook the day-long field visit on 30th October 2023. The following officers from M/s Vedanta Ltd such as Head of the Mines, Head of the Environment, Mines Manager, Geologist and EIA Coordinator were present during the site visit. The Project Proponent gave a brief about the layout of the mine lease area. The subcommittee during the site visit observed the following: -

1. The subcommittee visited the mine lease area which extends from mines office to the bottom pit by road covering a distance of 7.0 km in the lease area. The subcommittee also observed the boundary pillars erected by the Project Proponent alongside the mine lease boundary.
2. The subcommittee observed the dense vegetation throughout the mine lease area.

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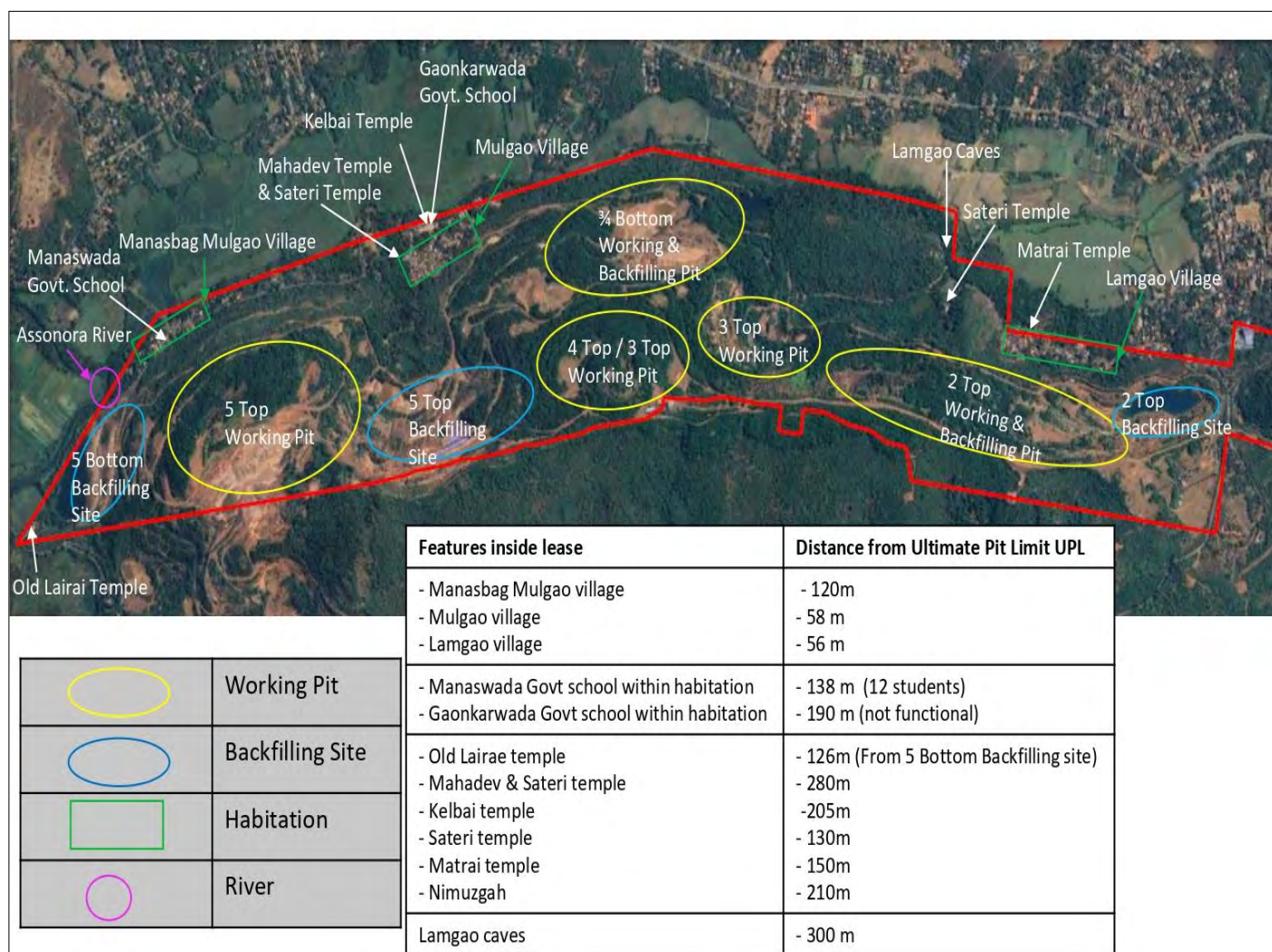


Figure 1: Google Image of Bicholim Mineral Block showing working & backfilling pits and mine lease area

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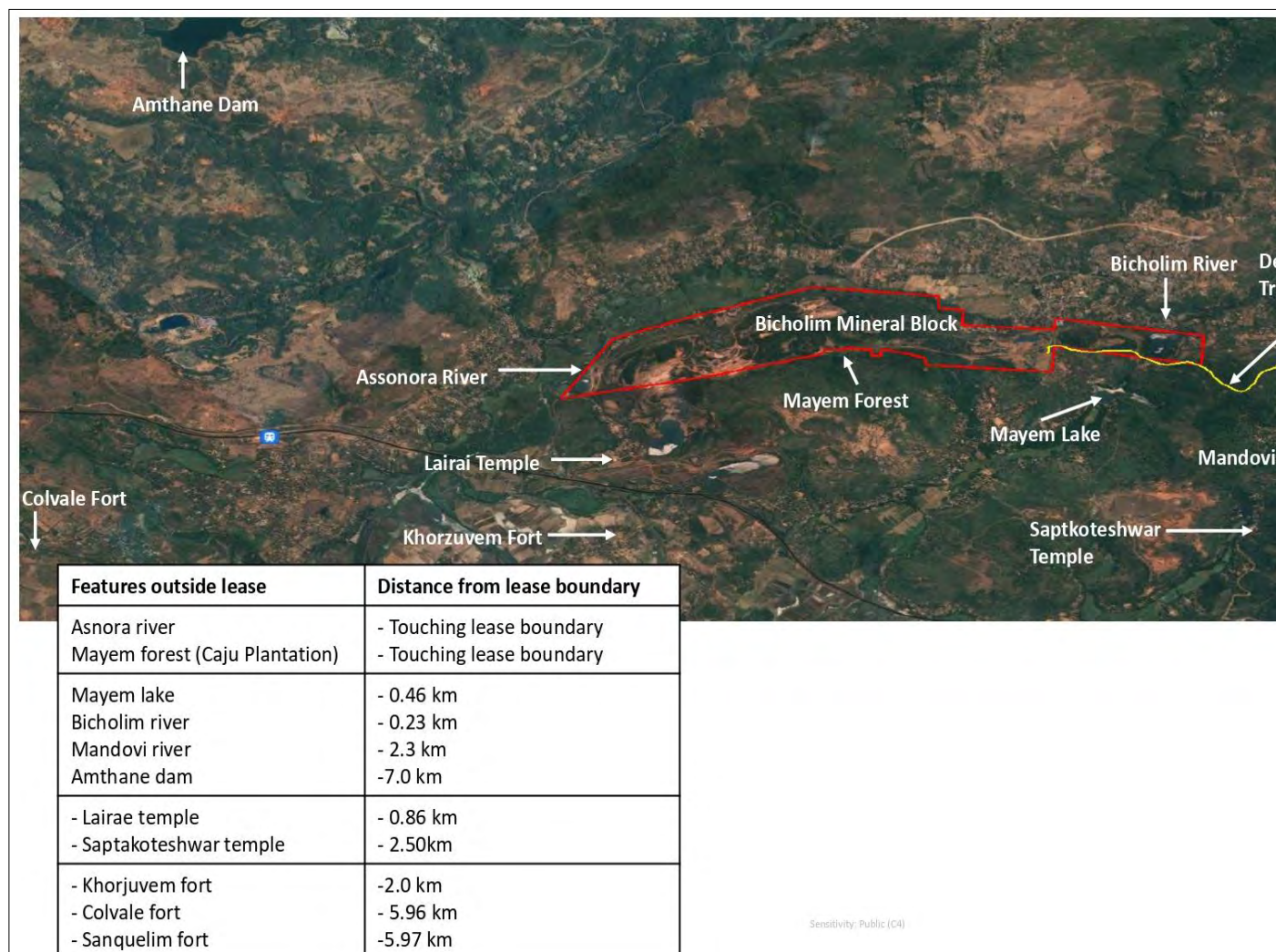


Figure 2: Google Image of Bicholim Mineral Block showing surface features in the bu

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Figure 3: Project Proponent explaining about mine layout and site features

3. The subcommittee visited the mine pit with stagnant rain water, top and bottom working pits. The Project Proponent has informed that the rain water in the mine pit is being used for dust suppression and agricultural purposes by the local farmers. The rainwater stagnant in the working pits will be pumped out and will be channelized through network of pipes and will be discharged into settling ponds. The Project Proponent also informed that the waste generated during mining will be temporarily stacked within the mining lease and will be backfilled in the exhausted portion in the working pits. The material from one pit will be used to backfill the other exhausted working pit.



Figure 4: Rainwater stagnant in the mined out pit

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Figure 5: Rainwater stagnant in the working pit

4. The subcommittee has observed that the permanent water sprinklers are not in place.
5. The subcommittee has observed the temple within the mine lease area and Assonora River touching the mine lease boundary. The Project Proponent has informed that the safety distance of 50m is left on either side of the river. A dense plantation has been carried out in the safety zone.
6. The subcommittee also visited the settling pond in the mine lease area. The subcommittee noted that the settling pond is poorly maintained. The Subcommittee suggested to construct silt check dam based on the rate of inflow. Subcommittee also suggested the Project Proponent not to discharge any water outside lease area without passing it through treatment plant.

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Figure 6: Settling Pond

7. The subcommittee visited the Mayem Forest boundary which is demarcated by poles with white flags from the mine lease area. The Project Proponent informed that the forest boundary is about 70-80m away from the mine lease area. The Differential Global Positioning System (DGPS) survey has been carried out by the Forest Dept but pillars are not demarcated by the Forest Dept. The Project Proponent also informed that a letter has been obtained from the Dept. of Forest stating that the forest land is not involved in the mine lease area. The subcommittee suggested that the Project Proponent should consult with the Forest Dept and should erect the pillars to differentiate the mine lease area from the forest boundary.
8. The subcommittee has visited the waste dump to see the dump height, dump slope and plantation made on waste dumps. The subcommittee noted that the plantation has been carried out using coir mats. The subcommittee suggested that the proper terracing has to be done and suitable measures to be undertaken for preventing soil erosion.

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Figure 7: Near Waste Dump

9. The subcommittee observed that the villages and schools are located in the mine lease area. The Project Proponent has informed that the villages such as Manasbag Mulgao village (~120m from Ultimate Pit Limit-UPL), Mulgao Village (~58m from UPL) and Lamgao Village (~56m from UPL) are located within the mine lease area. The Project Proponent also informed that the Manaswada Govt. School is located at a distance of ~138m from UPL with 12 no. of students and Gaonkarwada Govt. School is located at a distance of ~190m from UPL which is non-operational.
10. The subcommittee has observed that the crematorium ground is located within the mine lease area. The subcommittee also visited the Idgah located within the mine lease area. The Project Proponent has informed that the mining activity will be carried out by using ripper dozer combination. There will be no activity of drilling and blasting. A buffer zone of 200m will be maintained from Idgah. The subcommittee was of the view that the mining activity shall be strictly carried out by using only ripper dozer combination.
11. The subcommittee has visited the crushing and screening units in the mine lease area. The subcommittee noted that the crushing and screening units are not maintained well. The subcommittee opined that the fabrication works has to be carried out before starting mining operations and also suggested that the crushers and screening plant should have adequate arrangement to suppress dust and also measures should be taken to control noise.

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Figure 8: Crushing and Screening Units

12. The subcommittee has observed that there are four Schedule-I species reported in the study area. The subcommittee asked the Project Proponent to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022.
13. The subcommittee has visited the entire mineral transportation route of 5.48 km [4.54 km company owned dedicated road + 0.94 km public road] from the mine lease area to Sarmanas Jetty. The subcommittee has observed that there at two places public road is getting intersected. The width of the road is not adequate. The Project Proponent has informed that the under passes are proposed at the intersecting points and hence the public road will not be disturbed. Traffic marshals will be deployed at the intersecting point to monitor the movement of traffic. During rainy season, no transportation will be carried out and only developmental works will be carried out. The subcommittee also visited the Sarmanas Jetty. The subcommittee opined that the maintenance works has to be carried out at Sarmanas Jetty before commencing mining operations. The subcommittee was of the view that the Over Land Belt Conveyor (OLBC) from the mine lease area to Sarmanas Jetty may be solution for eco friendly transportation and economics.

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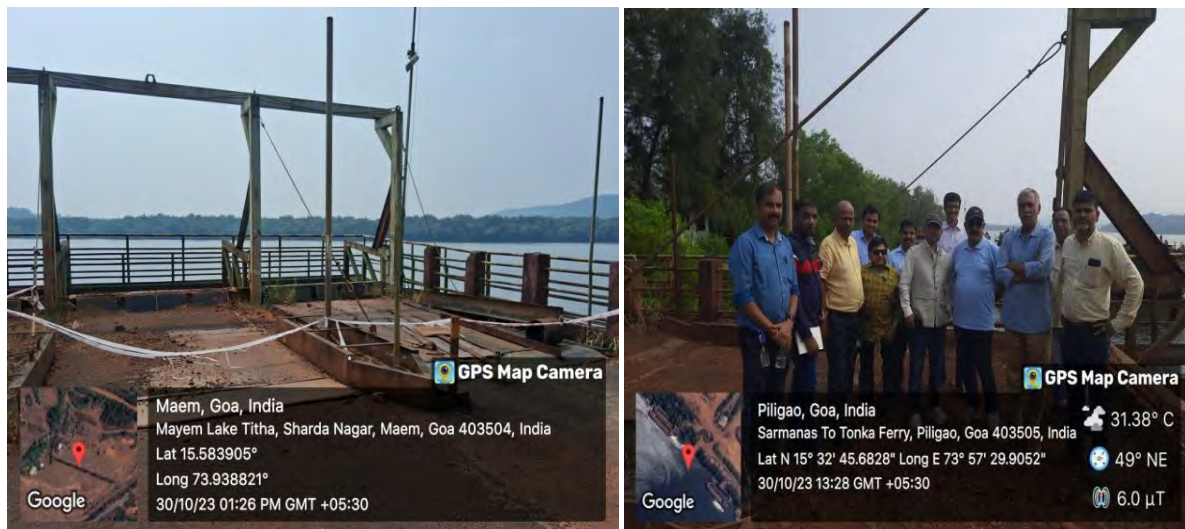


Figure 9: Sarmanas Jetty

14. The subcommittee opined that the Project Proponent needs to develop an own nursery.
15. The subcommittee also visited the nearby Sanquelim mine of Sesa Goa Ltd to see the reclamation activities carried out in the mined out area.

12. Recommendations of the Sub-committee:

1. The Project Proponent needs to submit the techno economic feasibility report for laying Over Land Belt Conveyor (OLBC) from the mine lease area to Sarmanas Jetty.
2. The subcommittee asked the Project Proponent to submit the ecology restoration plan for mined out pits for using as Water reservoir/Pisciculture.
3. The subcommittee noted that the transfer of material from one pit to other working pit will lead to transportation issues. The subcommittee asked the Project Proponent to identify the shortest lead distance and also to explore the possibility of concurrent backfilling. The Project Proponent also needs to submit the sequential stage wise mining in top and bottom working pits and their backfilling plan.
4. The Project Proponent needs to submit the action plan for strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge. The action plan for monitoring the water level and water quality before discharge needs to be submitted.

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5. The design of garland drain around the waste dumps to divert the water to settling ponds and the measures to be taken to arrest the suspended solids needs to be submitted. The measures to be taken for preventing the soil erosion on slope of waste dumps needs to be submitted.
 6. The Project Proponent needs to submit the action plan for installing permanent water sprinklers.
 7. The Project Proponent needs to submit the action plan and timeline to modify the crushing and screening units. The Project Proponent also needs to submit the material flow sheet and material balance.
 8. The Project Proponent needs to submit the action plan for developing their own nursery by mentioning the details of the area to be covered, species to be planted and budget proposed. Most of the standing vegetation in the lease area constitutes of *Acacia auriculiformis* and *Casuarina equisetifolia* and it is further invading the open areas through natural regeneration. The invasion may be checked through planting native species in the region.
 9. The Project Proponent needs to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022 or not. Accordingly, the Project Proponent shall submit the revised authenticated Schedule-I species. The Project Proponent also needs to submit the breakup of the conservation activities proposed under Wildlife Conservation Plan.
 10. The Project Proponent needs to submit the map demarcating the surface features in the mine lease area and their safety distances left/maintained as per mines acts and rules.
 11. The Project Proponent needs to provide proper treatment of channels and nallas flowing in the lease area for soil and water conservation. Scientifically designed and placed check dams and other engineering structures at different places can help control the erosion and loss of productive soil. Necessary study from competent institution/individuals may be done for this purpose.
- 13. Observation and Recommendation of the EAC: -**

The EAC noted that the site visit was conducted by the subcommittee during 29-31 October 2023. The EAC deliberated on the observation and recommendations of the

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subcommittee. After detailed deliberations, the EAC agreed to the recommendations of the subcommittee.

List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	14 th Nov., 2023	15 th Nov., 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes
2	Sh. Niranjana Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171.	Member	No	No
4	Shri. Avijit Ghosh (CMD- Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P.P.Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	Yes	No
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	Yes	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	Yes
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Viji Marg Rajinder Nagar, New Delhi – 110060	Member	No	No

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9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2 nd Main, 2 nd Cross,BhogadilInd Stage, Mysore-570026, Karnataka	Member	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice- Chancellor	Sardar Patel University,Mandi H.P. 175001	Member	No	No
11	Shri V. K. Soni, Representative of India Meteorological Department	Government of India, Ministry of Earth Sciences, India Meteorological Department, MausamBhawan, Lodi Road, New Delhi – 110003	Member	Yes	No
12	Shri Yogesh Kale/ Abhay Agarwal, Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes
13	Representative of Directorate General of Mines Safety	Directorate General of Mines Safety	Member	No	No
14	Shri Pankaj Verma	3 rd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes
15	Dr. Saurabh Upadhyay	2 nd Floor, Vayu Block, Indira ParyawaranBhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Scientist C	No	Yes



सत्यमेव जयते

Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Non-Coal Mining)



Minutes of AGENDA FOR 24TH EAC MEETING OF THE EXPERT APPRAISAL COMMITTEE (NON-COAL MINING SECTOR), SCHEDULED TO BE HELD DURING 26-28 DECEMBER, 2023 THROUGH VIDEO CONFERENCE. meeting Non-Coal Mining held from 26/12/2023 to 28/12/2023

MoM ID: EC/MOM/EAC/904227/12/2023

Agenda ID: EC/AGENDA/EAC/904227/12/2023

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

26/12/2023	10:30 AM	05:30 PM
27/12/2023	10:30 AM	05:30 PM
28/12/2023	10:30 AM	05:30 PM

1. Opening remarks

The 24th meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 26-28 December, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

2. Confirmation of the minutes of previous meeting

The minutes of the 23rd EAC meeting held during 5-7 December, 2023 were placed before the members of the EAC.

3. Details of proposals considered by the committee

Day 1 -26/12/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Guruvanipalli Limestone Mine (M.I Area 395.15 Ha) with expansion In limestone Production Limestone from 0.30 Million TPA To 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District- Kurnool (Andhra Pradesh) By M/s. Ultratech Cement Limited. by M/s. UltraTech Cement Ltd. located at KURNOOL, ANDHRA PRADESH

Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/AP/MIN/453165/2023	IA-J-11015/56/2021-IA-II(NCM)	23/11/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for mining of Limestone in Guruvanipalli Limestone Mine of M/s. UltraTech Cement Limited for expansion in Limestone Production from 0.30 Million TPA to 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha, located at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District Kurnool, Andhra Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at Central level.

ii. The mine lease area is located between Latitude: 15°03'19.99661" N to 15°05'36.79473" N and Longitude: 78°00'16.63709" E to 78°01'55.11414" E. The mine lease area falls under the Survey of India Toposheet No: D43F16, D43L13, D44A4 and 57 J/1 and falls in Seismic Zone – II.

iii. Details of previous Environmental Clearance (EC):

a) The Project Proponent submitted that initially Environmental Clearance was obtained vide Lr No J-11015/212/2008-IA.II(M) dated 01.07.2009 for a production of 0.30 MTPA in the mine lease area of 395.15ha in favour of M/s. UltraTech Cement Limited.

iv. Details of Terms of Reference:

a) The Project Proponent obtained Terms of Reference (ToR) vide ToRLr. No IA-J-11015/56/2021-IA.II(NCM) dated 23.12.2022 for Guruvanipalli Limestone Mine for expansion in Limestone Production capacity from 0.30 Million TPA to 4.0 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha.

v. Details of Mine lease:

S. no	LoI/Lease Grant order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Initial Grant of Mining lease in favour of M/s DakshinCement Limited vide G.O. Ms. No.149, Inds. & Com (M.II) Dept.,	30.09.1995	Limestone	02.01.1997 – 01.01.2017 (20 years)	Govt., of Andhra Pradesh	395.15
2	Transfer of Mining lease held by M/s DakshinCement Limited to M/s. Ultra Tech Cement Limited vide G.O. Ms.No.80, Inds. & Com (M-I) Dept.,	16.04.2012	Limestone	for the unexpired portion of the mining lease period i.e., upto 01.01.2017	Govt., of Andhra Pradesh	395.15
3	Extension of validity of mine lease vide G.O. Ms. No. 38	12.02.2019	Limestone	For the period upto 01.01.2047	Govt., of Andhra Pradesh	395.15

vi. Details of executed Mine leases:

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	02.01.1997	01.01.2017	Proceedings No. 5634/M4/95 dated 02.01.1997 in favour of M/s DakshinCement Limited
2	Transfer of mining lease deed	11.07.2012	01.01.2017	Affidavit bearing AK 772376 in favour of M/s. UltraTech Cement Limited
3	Supplementary lease deed	15.03.2019	01.01.2047	Affidavit bearing CH 337737

vii. Land Use/Land Cover of the Mine Lease Area:

Private land	230.02 ha
Government land	165.13 ha
Total Mining lease area (MLA)	395.15 ha
Private land for crusher, workshop & other infrastructure outside the mine lease area	No infrastructure is proposed outside the mine lease area

viii. Mining plan details:

Modified Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	AP/KNL/MP/LST-22/HYD
	Date	04.02.2021
	Mineral & (Major/Minor)	Limestone, (Major)
	Mine Lease Area, Ha	395.15
	Validity	2021-22 to 2025-26
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling: Drilling will be carried out using 150 mm dia drills. Blasting: The burden & spacing is 4 x 6 m, 5 x 8 m or more depending on the strata and the holes will be drilled upto 9 m depth with sub grade drilling of 1 m. Delay detonators/ shock tube detonators with ANFO, slurry, SME explosives, will be used to achieve better fragmentation and less throw of material.	
Geological Reserves	170.79 million Tonnes	
Mineable Reserves	108.81 million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/I)	Total Excavation: 4.31 million TPA Breakup of Total Excavation:	

B/Mineral Rejects/ Waste, MTPA)	1. Limestone: 4.0 Million TPA 2. Soil: 0.31 Million TPA
Life of mine	~31 years
Mine Bench Height & Bench Width	Bench height: 9 m Working Bench Width: 20-25 m (Working)
No. of Mine Benches	4 in current plan period & 6 at conceptual stage
plan period m bgl	312 m AMSL (37 m bgl)
Ultimate Depth of Mining, m bgl	294 m AMSL (55 m bgl)
Ground Water Table, m bgl	Pre-monsoon - 14.7 to 21.2 m bgl Post-monsoon - 12.5 to 19 m bgl
Details of ground water intersection	Water table will be intersected during the working and necessary permission will be taken before intersecting ground water table.
Individual bench slope	85o
Overall pit slope	45°
Details of existing/ proposed Crusher	An existing crusher is located in the adjacent mine lease, at about 2.0 KM distance from the current working pit and this crusher is being utilized for crushing of limestone. After exhausting the mineral reserves at the southern side of the mining lease area (near to the crusher), a crusher will be established at this mining lease for crushing the remaining limestone reserves
Mineral Beneficiation	Nil
RoM output size	50 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The transport of blasted material is being/will be done by dumpers (55 & 100 T) from mine faces to crusher located at a distance of 1.80 km in adjoining Tummalapenta Limestone mine and after crushing, the crushed limestone is being dispatched to the cement plant located about 3.1 km away from crusher, through the covered conveyor belt. Subsequently after exhaust of mineral reserves on southern side of the mining lease (near to the existing crusher), a crusher will be established at this mining lease for crushing the remaining limestone reserves and transported to cement plant through covered belt conveyor.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	Top Soil: - During Plan period, 0.34 million tonnes of Top soil will be generated which will be used for greenbelt and plantation - During conceptual period 1.34 million Tonnes of top soil will be generated which will be used for greenbelt and plantation. Over Burden:

	No OB generation is there in this mining project
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-
Additional information (if any)	There are some old slab quarries existing within the mining lease area. A Letter has been obtained from Department of Mines and Geology, Andhra Pradesh, vide letter no. 744/M4/1998 dated 09.07.2018 regarding the existence of old slab quarries in part of the mine lease area. The limestone is not uniform in quality across the deposit. Some areas are high in lime content and some are low. For mineral conservation and optimum utilization of the reserves, it is proposed to operate multiple pits simultaneously and also to meet the necessary ROM quality of the cement plant.

ix. Water requirement:

Total water requirement	300 KLD	Domestic	10 KLD
		Dust Suppression/Greenbelt	290 KLD
Source	Sourced from Cement plant and sump of existing Tummalapenta mine & later from this instant mine sump as and when developed.		
Permission for withdrawal/ intersection along with details of grant and its validity	Govt. of Andhra Pradesh, O/o The Commissioner, Panchayat Raj & Rural Development & Administrator, Apwalta accorded permission vide Lr.No. CORD-11028/6/2018- SLNA-GIS-CORD, dated 11/12/2021 to draw 2900 KLD of Rain water collected in the Mine pit and 500 KLD of groundwater from the existing bore wells of Thummalapenta village, Kolimigundla Mandal, Kurnool district and also 600 KLD of groundwater from the existing bore wells of Bhogasamudram Village, Tadipatri Mandal, Ananthapuramu District.		

x. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Guruvanipalli	Adjacent to the ML Area in East direction
Nearest Town	Tadipatri	16.0 km in SSW direction
Nearest State/National Highway	SH - 30	5.5 km in South direction
	SH - 57	4.0 km in SE direction
Interstate Boundary	-	
Railway Station/Railway line	Tadipatri	16.5 km in SSW direction
Water Bodies	Seasonal nallah passing through the lease area	-

	PeddaVanka (intermittent stream)	2.5 km in NE direction
	PeddaVanka (intermittent stream)	6.5 km in WSW direction
	SaddalaVengannaCheruvu (lake)	7.0 km in East Direction
Forest	Nil	-

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land with in the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent submitted the letter from the Govt. of Andhra Pradesh, Forest Department vide Lr. Rc.No. 21052/1/2023/WL-2, dated 01.11.2023 stating that 1. No Reserve Forest and Protected Forest etc., within 10 km radius of the study area. 2. No National Park, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridor, Tiger/Elephant Reserves etc., within 10 km radius of study area. 3. The nearest protected area is Rajiv Gandhi National Park at a distance of 66.59 km and GundlaBrahmeswra WLS is about 70.11 km from the proposed mine area.
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No. s and name of schedule-I species with authenticated letter)	Yes	The Project Proponent submitted the letter from the Govt. of Andhra Pradesh, Forest Department vide Lr. Rc.No. 21052/1/2023/ WL-2, dated 01.11.2023 stating that following Schedule-I animals are found in the impact zone of 10 km radius from the proposed boundary such as Bengal fox, Jackal, Jungle Cat, Small Indian Mongoose, Indian crested porcupine, Bonnet macaque, Indian Chameleon, Indian Cobra and Rat Snake. Further, the Project Proponent submitted that the Wildlife Conservation Plan for Schedule-I fauna with financial outlay of Rs 85.0 Lakhs was approved by the Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden vide letter dated 01.11.2023.
Wildlife Conservation Plan	Yes	

xii. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	74.98 ha
Budget for green plant & plantation till the e	62 lakhs (yearly 2 lakhs)

nd of life of mine.	
Budget for nursery	No Provision for Nursery
Details of existing plantation and its survival rate	<i>Pongamiapinnata</i> (Kanuga), <i>Azadirachta indica</i> (Neem), <i>Samanea saman</i> (Rain tree), <i>Cassia fistula</i> (SemaThangedi), <i>Delonix regia</i> (Gulmohar Tree). Survival Rate is 92%
No. of tree cuts in the mine lease area and compensatory afforestation	None
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & Non mineralized areas	14.30 Ha
50 m safety zone of nallah, roads, electric lines	35.50 Ha
500 m safety zones of nearest habitation villages (Exhausted Pit Boundaries & Non Mineralized areas)	25.18 Ha

xiii. Baseline Data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March to May, 2021
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season
Predominant Wind direction (From)	West
Ambient Air Quality (no. of locations) and results	9 Locations Result summary: PM10: 51.8mg/m ³ - 88.9mg/m ³ PM2.5: 26.9mg/m ³ - 51.3mg/m ³ SO ₂ : 6.4mg/m ³ - 12.3mg/m ³ NO ₂ : 13.2mg/m ³ -28.7mg/m ³
Noise level (no. of locations)	9 Locations Day Time (Lday) noise level: 50.6 dB (A) – 59.8 dB (A)

and results	Night Time (L _{night}) noise level: 41.8 dB (A) – 50.9 dB (A).		
Water Quality (no. of locations) and results	Parameters	Surface water (2 locations)	Ground water (8 locations)
	pH	6.92 – 7.26	7.04 – 7.55
	Total Dissolved Solids, mg/l	381 - 549	494 - 651
	Chloride as Cl ⁻ , mg/l	109.9 – 144.9	74.9 – 139.9
	Total Hardness, mg/l	209.6 – 292.3	267.3 – 405.9
	DO, mg/l	6.5 – 6.9	-
	BOD, mg/l	4.9 – 7.1	-
	COD, mg/l	20 - 26	-
Soil Quality (no. of locations) and results: 8 Locations	Parameters	Observed Values	
	pH	7.47 – 7.92	
	Electrical Conductivity (mS/cm)	0.25 – 0.58	
	SAR Value	0.38 – 0.63	
	Available Nitrogen, kg/ha	171.09 - 190.72	
	Available Potassium, kg/ha	168.45 - 559.27	
	Available Phosphorus, kg/ha	26.47 – 37.89	
Hydro geological study and results	The Project Proponent submitted the hydrogeological report and rainwater harvesting plan for Guruvaniipalli Limestone mine. The Project Proponent submitted also that the total groundwater recharge within the mine site will be the sum of recharge through pit and recharge through rainwater harvesting structure is 1,58,000 cu.m/annum. At present the groundwater intersection has not occurred, but during plan period water table will be intersected due to mining activities. Prior permission will be taken before intersection of ground water table.		
Traffic study	The Project Proponent submitted that the blasted material is being/will transported by dumpers from		

Study (no. of locations) and results	mine faces to crusher (located in adjacent mine) via haul road and after crushing finally the limestone is being/will be dispatched to the clinkerization unit located about 3.1 km away from this mine through conveyor belt. No public road will be used for transportation of limestone. Hence, traffic study is not required.

xiv. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	Indian Express on 02.06.2023 and Sakshi on 02.06.2023
Date of PH	04.07.2023 at 11:00 AM
Venue	Mining Lease Area of Guruvanipalle Limestone Mine 395.15 Ha
Chaired by	- Shri B. Pullaiah (District Revenue officer, Nandyal District, Nominated by District Collector) - Shri B Y Muni Prasad (Environment Engineer, Andhra Pradesh Pollution Control Board, Regional Office, Kurnool)
Main issues raised during PH	Drinking water facilities, Medical camp, Community hall, Employment, Environment and Development, Cattle grazing, R&R, Greenbelt development works, Pollution etc.,
Budget proposed for addressing issues raised during PH over 3 years	Capital Cost: 307.5 Lakhs Recurring Cost: 35.70 Lakhs

xv. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity						
Consent to Establish	Consent Order for Establishment was granted by the Andhra Pradesh Pollution Control Board vide Order No. 193/PCB/CFE/RO-KNL/HO/2011 dated 22.06.2012 for production capacity of 0.3 MTPA in an area of 33.50 ha in the mine lease area of 395.15 ha.						
Consent to Operate	Renewal of CFO was granted by the Andhra Pradesh Pollution Control Board vide order dated 23.11.2022 for 0.3 million TPA (Valid: 31.01.2024) under Water Act (1974) and Air Act (1981).						
Certified Compliance Report and Inspection date	Certified Compliance Report was issued by Sub-Office at Vijaywada, MoEF&CC vide File No. IRO/VIJ/EPA/EC-A/101/06-38/2022 dated 13.07.2023. Site visit was carried out by Sub-Office on 27.04.2023.						
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Department of Mines and Geology, Govt. of Andhra Pradesh vide Lr. No: 744/M4/1998 dated 04.08.2023 issued the production and dispatch details since inception to 30th June, 2023. <table><tr><th>S. No</th><th>Year</th><th>Production and Dispatch (in MT)</th></tr><tr><td>1</td><td>1997-98 to</td><td>0</td></tr></table>	S. No	Year	Production and Dispatch (in MT)	1	1997-98 to	0
S. No	Year	Production and Dispatch (in MT)					
1	1997-98 to	0					

	2013 to 2014	
2	2014-15	1000
3	2015-16	0
4	2016-17	1000
5	2017-18	30000
6	2018-19	39882
7	2019-20	41000
8	2020-21	44882
9	2021-22	111882
10	2022-23	296882
11	2023-24 (up to 30th June, 2023)	64386

xvi. Rehabilitation & Resettlement:

R & R d etai ls	The Project Proponent submitted that total mining lease area is 395.15 ha out of which 230.02 ha is a private agricultural land and 165.13 ha is government land. Out of total private land of 230.02 ha, 104.77 ha land has been purchased by UTCL and remaining 125.25 ha of lands need to be purchased. There are 83 houses present within mine lease area, hence there will be need of displacement due to the mining activities. There are 279 families out of which 139 PAFs whose land 125.25 ha. is yet to be purchased and 140 PAFs whose land 104.77 ha. have already been acquired. A budget of Rs 28.683 Cr have been earmarked towards R&R.

xvii. Court case details:

Court Case, No and its present status	The Project Proponent submitted an undertaking vide letter dated 12.12.2023 stating that there is no litigation pending against the project and order passed by any Court of Law against the project under the Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xviii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: CM 524112 dated 19.04.2021 stating that they will comply with all the statutory requirements & judgment of Hon'ble Supreme Court order dated 2nd August 2017 in w.r.t. Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.

Undertaking by Project Proponent in EIA/EMP report	The Project Proponent submitted an undertaking vide letter dated 22.11.2023 stating that they have reviewed the EIA report and take full responsibility and ownership of the contents presented in the EIA report by J.M. EnviroNet Pvt. Ltd and instructions as per MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009 has been followed in the preparation of this EIA Report.
Undertaking by Consultant in EIA/EMP report	The Consultant submitted an undertaking vide letter dated 24.04.2023 to the effect that the conditions laid down in Terms of Reference issued by MoEF&CC, New Delhi vide letter no. J11015/56/2021-IA.II(NCM) dated 23.12.2022 have been complied as per data/details provided by Project Proponent & as per Mining Plan along with Progressive Mine Closure Plan approved by IBM and the data submitted are factually correct.
Plagiarism Certificate	The Head of the Accredited Consultant Organization/ Authorized person certified that this EIA Report has been evaluated by using online software viz. Plagiarism Checker X on 20.11.2023. The report produced has been analyzed by the system and based on it and certify that the EIA Report produce in accordance with good scientific practice.

xix. Details of the Environment Management Plan (EMP):

Sl. No.	Activities	Proposed Cost (In Lakhs)	
		Capital	Recurring
A.	Mitigative Measures		
1	water tanker for water sprinkling in other roads and mining areas/activities.	24.43	5.14
2	Fixed Water Sprinkler on Haul Road	50	10
3	Green belt and plantation on 62.90 ha (10.42 ha on 7.5 m lease periphery + 25.18 ha on bench plantation + 27.30 ha on safety zone of nala, road and habitation)	394	2.62
4	Drip irrigation facility for plantation	5.0	0.5
5	Protection for Plantation (Fencing around area)	20	0.30
6	Garland Drain around Low line of mining pit	0.20	0.56
7	10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine lease area.	30.0	2.0
	Sub Total	523.63	21.12
B.	Monitoring		
1	Installation of continuous Ambient Air Quality Monitoring Station (3 nos)	150	15
2	Display Board at main gate for display of Ambient, Air, Noise and Hazardous waste monitoring data.	5.00	0.50

3	Six Ambient Air Quality Monitoring Station at Village Guruvanipalle, Ankireddipalle, Petnikota	5.00	0.50
4	Providing Ear muffs/plus to workers working in high noise area	2.37	0.00
5	Air monitoring Equipment for PM10 & PM2.5	1.70	1.50
6	Work Place Noise Level Monitoring (4 no. of locations & quarterly frequency)	-	0.10
7	Installation of 03 piezo-meter along the periphery in the premises	5.00	0.50
8	Occupational Health Check-up of Mines Employees	10.00	0.00
	Sub total	169.07	18.1
C.	Wildlife conservation plan	85.00	0.00
	Total	777.70	39.22

xx. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of public hearing)	Capital Cost: Rs. 7.78 Crores/- Recurring Cost: Rs. 40 Lakh/ annum
Project Cost	Rs. 48 Crores
Employment	71 persons

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent/EIA Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area. The Project Proponent showed the boundary of the mine lease area and the cement plant. The Project Proponent also indicated the location of the existing crusher located in the adjacent Tummalapenta Limestone mine. After exhaust of mineral reserves on southern side of the mine lease (near to the existing crusher), a crusher will be established at this instant mine lease for crushing the remaining limestone reserves and will be transported to cement plant through covered belt conveyor. In the 2nd phase, crusher will be installed in the northern part of the mine lease area and the same will be transported through covered belt conveyor and there will be no issue of crossing the public road and the roads will not be disturbed. The Project Proponent informed the EAC that during initial period of 5 years of mining operation existing haul roads will be used and no public road will be used for mineral transportation purpose. A nallah passes through the southern part of the mine lease area and will not be disturbed. The EAC asked about the old workings visible in the eastern and western side of the mine lease area. The Project Proponent informed the EAC that there are some old slab quarries. The EAC asked the Project Proponent to take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself.

The EAC asked the Project Proponent that when will the peak production will be achieved. The Project

Proponent informed the EAC that peak production of 4.0 MTPA will be achieved in the 5th year i.e., 2025-26. No National Park, Wildlife Sanctuary, Reserve and Protected forest located within 10km radius of the study area. The nearest protected area is Rajiv Gandhi National Park at a distance of 66.59 km and Gundla Brahmeswra WLS is about 70.11 km from the proposed mine area. The mine lease area falls under Kurnool District only. There will be no waste generation from this mine. Baseline data was carried out during March-May 2022 (Summer Season). Predominant wind direction is from west. Environment Impact Assessment was carried out for normative production capacity of 13333 TPD and peak production capacity of 15333 TPD to assess the pollution. The resultant concentration of PM10 will be 67.27 µg/m³ and PM2.5 will be 36.55 µg/m³. The no. of working days will be 305 @ 3 Shifts of 8 working hours. At the end of life of mine, an area of 155.32 ha will be excavated, 163.23 ha will remain undisturbed and an area of 74.98 will be brought under greenbelt/plantation. The excavated area will be converted into water reservoir.

The Project Proponent showed the photographs of the greenbelt and plantation developed within the mine lease area. The Project Proponent informed the EAC that the public hearing was conducted on 04.07.2023. A budget of Rs 307.5 Lakhs has been earmarked as a Capital cost and Rs 35.70 Lakhs as a recurring cost towards to address the concerns of the public hearing with a timeline of three years. The proposed cost for Environment Management Plan (EMP) is Rs 7.78 Crores. The EAC asked the Project Proponent to show the existing and proposed list of machineries. The Project Proponent presented the existing and proposed list of machineries required for expansion. The EAC observed that the production is suddenly increasing from 1.0 MTPA in 4th year to 4.0 MTPA in the 5th year. The Project Proponent informed the EAC that at present mine is operating in a single shift and later the mine will be operated in three shifts to achieve the proposed production capacity. The EAC asked the Project Proponent to ensure that the machinery requirement/capacity to match with the proposed expansion production capacity. The Project Proponent presented the certified past production details and certified compliance report dated 13.07.2023. Site visit was carried out by Sub-Office on 27.04.2023. Sub-Office of MoEF&CC has certified that no non-compliances were detected.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC in its meeting held during 26-28 December, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance (EC) to M/s. UltraTech Cement Limited for mining of Limestone in Guruvanipalli Limestone Mine for expansion in Limestone Production from 0.30 Million TPA to 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha, located at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District Kurnool, Andhra Pradesh subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

3.1.5. Recommendation of EAC

Recommended

3.1.6. Details of Environment Conditions

3.1.6.1. Specific

Awareness on Single Use Plastic (SUP)

1.	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

Cleaner production

1.	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

Conservation of Wildlife

1.	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.

2.	The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
3.	The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
Continuous Ambient Air Quality Monitoring System (CAAQMS)	
1.	The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
Crusher	
1.	The Project Proponent shall seek permission from Ministry before installing any crusher in the mine lease area.
Diversion of Nallah	
1.	No Nallah should be disturbed or diverted at any stage of the mining operation.
EMP implementation	
1.	The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 7.78 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
2.	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
Environment Monitoring & Reporting	
1.	The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
Fugitive Dust	
1.	The Project Proponent needs to take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself. The dense plantation shall be carried out in the vicinity of the crusher. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.
2.	The Project Proponent needs to make provision for permanent water sprinklers instead of water tankers. About, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. The Project Proponent needs to put effort to reduce water consumption by 30%.
Garland drains	
1.	The Project Proponent shall periodically maintain the garland drains, retaining wall and other water management

	structures in the mine lease area.
Green belt and Plantation	
1.	The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.
Ground vibration study	
1.	The Project Proponent needs to carry out ground vibration study through reputed institute to determine maximum charge per hole and charge to be blasted per delay so that ground vibrations are minimized and kept within permissible safe limits fixed by DGMS.
Occupational health checkup	
1.	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
Permission for Groundwater withdrawal	
1.	NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
Pollution load	
1.	The Project Proponent needs to ensure that the machinery requirement/capacity shall match with the proposed expansion production capacity so as to avoid the sudden increase in pollution load.
Public hearing issues	
1.	The budget of Rs 307.5 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
Public road	
1.	No public road shall be used for mineral transportation purpose.
Regrassing	
1.	
Training program	

1.	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.
Water reservoir	
1.	The mined out pits shall be used as Water reservoir/Pisciculture. Fencing should be made to prevent any inadvertent entry of men and cattle.

3.1.6.2. Standard

1(a)	Mining of minerals
Air quality monitoring and preservation	
1.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
1.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
Corporate Environment Responsibility (CER)	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
Green Belt	
1.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
Land reclamation	
1.	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly,

	particularly after monsoon season, and maintained properly.
1.	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
1.	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
1.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
Mining plan	
1.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
1.	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
Miscellaneous	
1.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
1.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
1.	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
1.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
1.	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition

	which is fit for growth of fodder, flora, fauna etc.
1.	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
1.	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
1.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
1.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
1.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
Noise and vibration monitoring and prevention	
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
1.	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
Public hearing and human health issues	
1.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
Statutory compliance	
1.	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
1.	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.

1.	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
1.	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
1.	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
1.	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
Transportation	
1.	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
1.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
Water quality monitoring and preservation	
1.	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
1.	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient

	number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
1.	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
1.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
1.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
1.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
1.	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
null	
1.	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
1.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Enhancement of Ore production [2000-3000TPD] and Processing plant [3000-4000TPD] of Hutti Gold Mine (within the existing premises/Mining Lease Area, without additional land acquisition) by THE HUTTI GOLD MINES COMPANY LIMITED located at RAICHUR,KARNATAKA

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/KA/MIN/436624/2023	J-11015/13/2003.IA.II (M)	05/08/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

The instant proposal is for Terms of Reference of M/s The Hutti Gold Mines Company Limited for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2(b) Mineral Beneficiation and falls under Category “A” as the mine lease area is greater than 250ha and appraised at the Central level.
- The mine lease area is located between Latitude: 16°12’29.55813’’N to 16°11’57.54790’’N and Longitude: 76°39’38.73430’’ E to 76°39’42.06560’’E. The mine lease area falls under the Survey of India Toposheet No: 56 D/12.
- The proposal was earlier considered in the 19th EAC (Non-Coal Mining) meeting held during 24-25 August, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 29.11.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its EAC meeting held during 24-25 August, 2023 and compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 24-25 August, 2023	Reply by Project Proponent
1	The Project Proponent needs to submit the details of the chronology of the two mine leases and their amalgamation into single lease with supporting documents clearly mentioning the mine lease area also to clarify whether any amendment in EC has been obtained after renewal as a single mine lease during the year 2008.	The Project Proponent submitted that initially mining lease was granted under the mining lease no. 1564 for mining of gold and associated minerals over an area of 528.35 Ha (1305.6 Acres) for a period of 30 years from 20.12.1978 to 19.12.2008. Then, the second mining lease was granted under the mining lease no. 1734 for mining of Scheelite Mineral over an area of 528.35 Ha (1305.6 Acres) for the period coterminous with the original lease i.e., up to 19.12.2008. Further, the Project Proponent submitted that the ML no. 1564 and M L no. 1734 for mining of Gold and associated minerals and Scheelite Mineral respectively, renewed under the Mining Lease no. 2671 for mining of Gold, Scheelite and associated minerals. There was no amalgamation of mining lease of M L no. 1564 and M L no.1734. The Project Proponent also submitted the letter issued by the Govt. of Karnataka vide Lr No. CI 113 CMC 2016 Bengaluru, dated 14.02.2019 stating that as per the provision of Section 8A (8) of MMDR Act, 1957 read with Rule 3(1) of the Mineral (Mining by Government Company) Rules, 2015, the period of mining lease bearing no: 2671 held by M/s Hutti Gold Mines Company Limited shall extended up to 19.12.2028.

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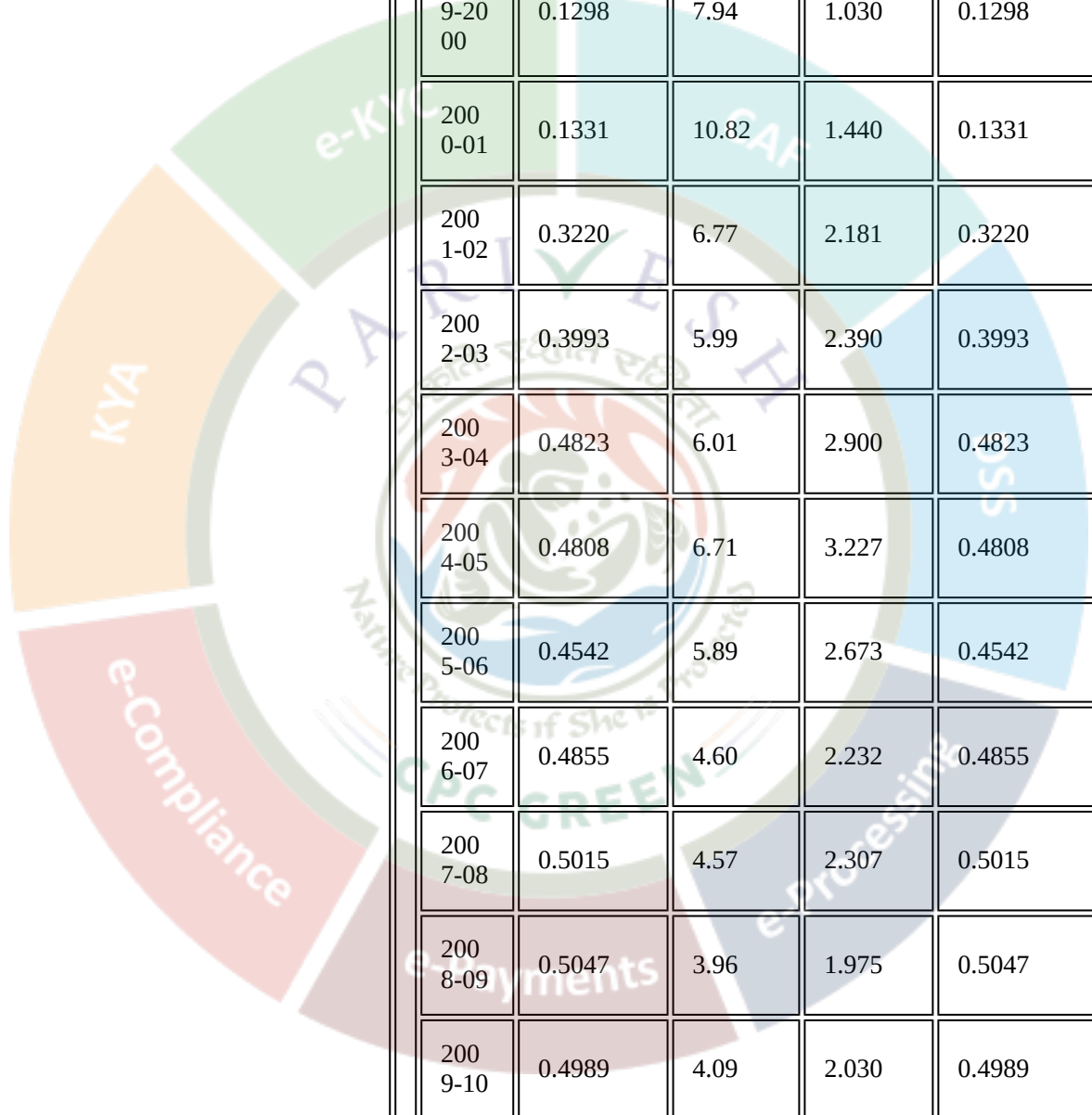
The Project Proponent needs to submit the certified past production details from the inception of the mining operation to 2011-12.

The Project Proponent submitted the letter from the Office of the Director, Dept. of Mines and Geology, vide Lr.No DMG/DCBML-2671/2023-24/6799 Bengaluru-1, dated 25.09.2023 from the period 1948-49 to 2022-23.

Year	Ore production			Ore processing Tonnage (Million Tonnes)
	Tonnage (Million Tonnes)	Recovery grade (g/t)	Gold produced (Tons)	
1948-49	0.0039	19.01	0.074	0.0039
1949-50	0.0265	7.60	0.202	0.0265
1950-51	0.0289	8.81	0.255	0.0289
1951-52	0.0350	8.02	0.281	0.0350
1952-53	0.0424	7.58	0.321	0.0424
1953-54	0.0620	8.49	0.527	0.0620
1954-55	0.0751	7.24	0.544	0.0751
1955-56	0.0756	7.45	0.563	0.0756
1956-57	0.0760	6.47	0.491	0.0760
1957-58	0.0776	5.68	0.440	0.0776
1958-59	0.0802	5.78	0.464	0.0802
1959-60	0.0954	5.22	0.498	0.0954
1960-61	0.1045	6.28	0.656	0.1045
1961-62	0.1105	7.07	0.781	0.1105

196 2-63	0.1095	8.22	0.900	0.1095
196 3-64	0.0531	8.04	0.427	0.0531
196 4-65	0.0959	8.02	0.768	0.0959
196 5-66	0.0804	9.76	0.785	0.0804
196 6-67	0.1068	8.62	0.921	0.1068
196 7-68	0.1086	8.48	0.921	0.1086
196 8-69	0.1065	9.13	0.972	0.1065
196 9-70	0.1258	7.25	0.912	0.1258
197 0-71	0.1758	7.59	1.334	0.1758
197 1-72	0.2041	6.29	1.283	0.2041
197 2-73	0.2134	6.23	1.328	0.2134
197 3-74	0.2157	6.60	1.423	0.2157
197 4-75	0.1866	6.84	1.276	0.1866
197 5-76	0.1789	6.54	1.170	0.1789
197 6-77	0.1401	6.28	0.880	0.1401
197 7-78	0.1090	7.84	0.855	0.1090
197 8-79	0.1191	6.65	0.792	0.1191

197 9-80	0.1100	7.65	0.842	0.1100
198 0-81	0.1479	5.24	0.774	0.1479
198 1-82	0.1451	6.57	0.954	0.1451
198 2-83	0.1422	5.26	0.749	0.1422
198 3-84	0.1462	5.58	0.816	0.1462
198 4-85	0.1364	6.32	0.862	0.1364
198 5-86	0.1510	5.54	0.837	0.1510
198 6-87	0.1558	5.88	0.916	0.1558
198 7-88	0.1631	5.37	0.876	0.1631
198 8-89	0.1828	5.29	0.968	0.1828
198 9-90	0.1599	5.38	0.861	0.1599
199 0-91	0.1965	5.25	1.032	0.1965
199 1-92	0.2012	5.34	1.075	0.2012
199 2-93	0.1809	4.86	0.880	0.1809
199 3-94	0.1775	5.42	0.962	0.1775
199 4-95	0.2338	5.21	1.218	0.2338
199 5-96	0.1873	5.07	0.949	0.1873



199 6-97	0.1864	6.59	1.228	0.1864
199 7-98	0.1667	7.28	1.213	0.1667
199 8-99	0.1583	7.25	1.147	0.1583
199 9-20 00	0.1298	7.94	1.030	0.1298
200 0-01	0.1331	10.82	1.440	0.1331
200 1-02	0.3220	6.77	2.181	0.3220
200 2-03	0.3993	5.99	2.390	0.3993
200 3-04	0.4823	6.01	2.900	0.4823
200 4-05	0.4808	6.71	3.227	0.4808
200 5-06	0.4542	5.89	2.673	0.4542
200 6-07	0.4855	4.60	2.232	0.4855
200 7-08	0.5015	4.57	2.307	0.5015
200 8-09	0.5047	3.96	1.975	0.5047
200 9-10	0.4989	4.09	2.030	0.4989
201 0-11	0.4964	4.46	2.006	0.4964
201 1-12	0.4498	2.87	1.396	0.4498
201 2-13	0.4865	2.95	1.435	0.4865

		<table><tr><td>201 3-14</td><td>0.4867</td><td>2.75</td><td>1.293</td><td>0.4867</td></tr><tr><td>201 4-15</td><td>0.4695</td><td>2.37</td><td>1.245</td><td>0.4695</td></tr><tr><td>201 5-16</td><td>0.5246</td><td>2.74</td><td>1.473</td><td>0.5246</td></tr><tr><td>201 7-18</td><td>0.5089</td><td>2.98</td><td>1.514</td><td>0.5089</td></tr><tr><td>201 8-19</td><td>0.5374</td><td>2.91</td><td>1.563</td><td>0.5374</td></tr><tr><td>201 9-20</td><td>0.5403</td><td>2.77</td><td>1.499</td><td>0.5403</td></tr><tr><td>202 0-21</td><td>0.3803</td><td>2.47</td><td>0.940</td><td>0.3803</td></tr><tr><td>202 1-22</td><td>0.4197</td><td>2.88</td><td>1.209</td><td>0.4197</td></tr><tr><td>202 2-23</td><td>0.5395</td><td>2.35</td><td>1.270</td><td>0.5395</td></tr></table>	201 3-14	0.4867	2.75	1.293	0.4867	201 4-15	0.4695	2.37	1.245	0.4695	201 5-16	0.5246	2.74	1.473	0.5246	201 7-18	0.5089	2.98	1.514	0.5089	201 8-19	0.5374	2.91	1.563	0.5374	201 9-20	0.5403	2.77	1.499	0.5403	202 0-21	0.3803	2.47	0.940	0.3803	202 1-22	0.4197	2.88	1.209	0.4197	202 2-23	0.5395	2.35	1.270	0.5395
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3	The Project Proponent needs to submit the copies of the Consent to Operate (CTO) from its inception.	The Project Proponent submitted the copies of Consent to Operate as given below in table: <table><tr><th>S. No</th><th>Documents</th><th>File no.</th><th>Validity</th></tr><tr><td>1</td><td>Consent to Establish (CTO)</td><td>624/KSPCB/R0900004/APC/2000-01/1246</td><td>01/07/2000 to 30/06/2001</td></tr><tr><td>2</td><td>Consent to Establish (CTO)</td><td>311/KSPCB/TC/WPC/DEO-3/2001/651</td><td>21/09/2001 to 30/06/2002</td></tr><tr><td>3</td><td>Consent to Establish (CTO)</td><td>KSPCB/SEO-2/SC&M/DEOAEO3/2002-03/77</td><td>09/07/2002 to 30/06/2003</td></tr><tr><td>4</td><td>Consent to Establish (CTO)</td><td>KSPCB/APC/IND2/CKM/DEO-TC/AEO-2/2002-03/780</td><td>28/10/2002 to 30/06/2003</td></tr><tr><td>5</td><td>Consent to</td><td>KSPCB/APC/RCR/DE</td><td>01/07/2003</td></tr></table>	S. No	Documents	File no.	Validity	1	Consent to Establish (CTO)	624/KSPCB/R0900004/APC/2000-01/1246	01/07/2000 to 30/06/2001	2	Consent to Establish (CTO)	311/KSPCB/TC/WPC/DEO-3/2001/651	21/09/2001 to 30/06/2002	3	Consent to Establish (CTO)	KSPCB/SEO-2/SC&M/DEOAEO3/2002-03/77	09/07/2002 to 30/06/2003	4	Consent to Establish (CTO)	KSPCB/APC/IND2/CKM/DEO-TC/AEO-2/2002-03/780	28/10/2002 to 30/06/2003	5	Consent to	KSPCB/APC/RCR/DE	01/07/2003																					
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	Operate (CT O)	O-TC/2003-04/335	to 30/06/2004
6	Consent to Operate (CT O)	KSPCB/WPC/RCR/2003-04/343	01/07/2003 to 30/06/2004
7	Consent to Operate (CT O)	KSPCB/WPC/SEO-2/S C&M/DEO/AEO/2004-05/342	20/12/2004 to 30/06/2005
8	Consent to Operate (CT O)	KSPCB/WPC/SEO-3/DEO-TC/AEO-3/2005-06/65	29/06/2005 to 30/06/2006
9	Consent to Operate (CT O)	KSPCB/SEO-4/EO/DEO-3/06-07/149	01/07/2006 to 30/06/2007
10	Consent to Operate (CT O)	KSPCB/APC/SEO-4/EO/DEO/AEO/07-08/211	01/07/2007 to 30/06/2008
11	Consent to Operate (CT O)	KSPCB/SEO/DEO/AEO/08-09/539	01/03/2008 to 30/06/2009
12	Consent to Operate (CT O)	KSPCB/SEO/Mining/AEO/09-10/725	01/07/2009 to 30/06/2010
13	Consent to Operate (CT O)	25/KSPCB/SEO/DEO/AEO/2011-12/95	01/07/2010 to 30/06/2011
14	Consent to Operate (CT O)	271/PCB/MIN/CFO/2012-13/1383	21/12/2012 to 30/06/2013
15	Consent to Operate (CT O)	313/PCB/MIN/CFO/2013-14/1410	18/11/2013 to 30/06/2014
16	Consent to Operate (CT O)	321/PCB/MIN/CFO/2004-15/1651	01/07/2014 to 30/06/2015
17	Consent to Operate (CT O)	416/PCB/ MIN/CFO/2015-16/1506	01/07/2015 to 30/06/2016
18	Consent to	AWH-30621 PCB ID 28	11/05/2016

iv. Details of previous Environmental Clearance (EC):

a) Initially, the Project Proponent obtained Environmental Clearance (EC) vide EC Lr.No: J-11015/13/2003.IA.II(M) dated 17.11.2004 for Hutti Underground Gold mine of M/s Hutti Gold Mines Company Ltd., for expansion in production of Gold ore from 0.351 MTPA to 0.6 MTPA over an area of 308.35 ha under the EIA Notification, 1994.

v. Details of Mine Lease:

- The Project Proponent has submitted that initially mining lease deed was executed on 20.12.1978.
- The original grant notification was issued vide Notification No. CI 128 MMN 2011, dated 26.03.2012.
- The Project Proponent submitted the copy of the mine lease deed made on 22.03.2014 for a period of 20 years w.e.f. 19.12.2008.
- The Project Proponent submitted the letter issued by the Govt. of Karnataka vide Lr No. CI 113 CMC 2016 Bengaluru, dated 14.02.2019 stating that as per the provision of Section 8A (8) of MMDR Act, 1957 read with Rule 3(1) of the Mineral (Mining by Government Company) Rules, 2015, the period of mining lease bearing no: 2671 held by M/s Hutti Gold Mines Company Limited shall extended up to 19.12.2028.

vi. The Project Proponent has submitted that the entire mine lease area of 528.35 ha is a Govt. land.

vi.i. Details of Mining Plan:

- The Project Proponent has submitted that the Modification of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide Lr.No: 279/356/92/BNG/803 dated 09.04.2018 for mining of Gold over an area of 528.35 ha for the period 2018-19 to 2022-23.
- The method of mining will be mechanized underground mining method.
- The mined out ore will be transported to the processing plant by trucks and conveyor belt. The gold ore will be treated in processing plant by various stages to recover the final product gold.
- The oxide ore will be mined first and will be extracted by adopting Grinding, Gravity Concentration, Thickening & Leaching-Carbon-In-Pulp-Elution & Electro Winning-Cyanide Detoxification-Refining.
- The mill tailings will be disposed of separately in a designated tailing dump within the mine lease area. The tailings will be disposed by pumping in slurry form.
- The generation of waste rock estimated as around 4,37,414 Tonnes during the period 2020-21 to 2022-23, out of which 49% will be used as road metal, building construction jobs and remaining 51% as filling materials in completely depleted stopes. There is no sub grade ore or mineral produced.
- Disposal methods being practiced includes coarse material in stope filling in underground and fine material is stored in upstream embankment method in tailings dam. About 1400-1500 tonnes per day, tailings estimated to dispose to the dump and 300-400 tons per day coarse sand estimated to be used for stope filling.

viii. The Project Proponent has submitted that the source of supply of water is from Krishna river (20 km from mine), Dump recycling water and mined out water. About 25.88% of water is recycling. About 4600 KLD of water from Krishna river is being used every day. For the expansion proposals, the required quantity of water for additional manpower, ore processing works out to be 1320 KLD and will be met from Krishna river and recycled water.

ix. The Project Proponent has submitted that there is no forest land within the mine lease area and Reserve Forests are located more than 5km from the mine lease area. The Project Proponent also submitted that there is no National Park, Wildlife Sanctuary, Eco Sensitive Area, Western Ghats within 10 km radius of the mine lease area. Further, the Project Proponent has submitted that Hutti Nadi (Seasonal Odai), Odai (Seasonal nala) are found within the mine lease area and Canal near medinapur and Hire halla are located at a distance of 0.77 km, W and 1.81 km, WNW respectively from the mine lease area. Hutti village is located within the mine lease area.

x. The Project Proponent has submitted that an area of 66.08 ha has been developed under greenbelt. The proposed area for the development of greenbelt will be 108.27 ha and no. of saplings proposed to plant is 1,51,578 no.s with a

budget of Rs 1500 Lakhs.

xi. The Project Proponent vide letter dated 24.04.2023 submitted an undertaking stating that the proposed expansion proposal is not a violation as per provision S.O 804 (E) dated 14.03.2017 and SOP dated 07.07.2021.

xii. The Project Proponent has submitted that since it is an underground mine, the question of reclamation and rehabilitation does not arise and no R&R is involved in this project.

xiii. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.

xiv. The Project Proponent has submitted that the total cost of the proposed expansion project is Rs 10,000 Lakhs. The existing manpower is 3892 persons and the proposed manpower for the expansion will be 1000 persons.

3.2.3. Deliberations by the committee in previous meetings

Date of EAC 1 :24/08/2023

Deliberations of EAC 1 :

The Project Proponent/Consultant has informed the EAC that the instant proposal was earlier considered in the 14thEAC (Non-Coal Mining) meeting held during 3-4 May, 2023 wherein the EAC returned the proposal in present form to submit the requisite information. Now, fresh proposal for Terms of Reference has submitted along with the information sought by the EAC. The Project Proponent/Consultant has presented the KML before the EAC and shown the boundary of the mine lease area, no. of existing shafts and proposed shafts, housing colony, infrastructure and tailing dams in the northern side of the mine lease area. The Project Proponent has informed the EAC that the fresh proposal for Terms of Reference has been submitted for both the project activity 1(a) Mining of Minerals and 2(b) Mineral Beneficiation.

The Project Proponent has shown the certified past production details from the Office of the Senior Geologist, Dept of Mines & Geology, Raichur vide letter dated 12.06.2023 for the year 2012-13 to 2021-22. The EAC asked the Project Proponent when the initial EC was obtained. The Project Proponent has informed the EAC that the EC was obtained on 17.11.2004 under EIA, 1994. The EAC asked the Project Proponent to show also the certified past production details from the year 2004-05 to 2011-12. The Project Proponent informed the EAC that the details of the production during the said period was not available with the Dept. of Mines & Geology (DMG) and hence the DMG has not certified the production details for the period 2004-05 to 2011-12. The EAC asked the Project Proponent whether mine lease were amalgamated after the grant of EC dated 17.11.2004. The Project Proponent informed the EAC they had two leases from 1978 to 2008 with ML No.'s 1564 and 1734. Based on the request made by the PP, the mining lease no. 1564 and 1734 were renewed as single lease bearing ML No. 2671 during the year 2008. The EAC noted that the Project Proponent has obtained the EC on 17.11.2004 and renewed as single lease during the year 2008. The EAC was of the view it is not able to ascertain the violation with limited information informed by the Project Proponent and hence the EAC asked the Project Proponent to submit the details regarding chronology of the mine lease including the amalgamation of the mine lease with supporting documents and also to clarify whether any amendment in EC has been obtained after renewal as a single mine lease during the year 2008. Then, the Project Proponent has shown the Annexure-III wherein the Project Proponent has mentioned that the copies of Consent to Operate (CTO) are not available with them. The EAC disagreed with the statement of the Project Proponent.

After detailed deliberations, the EAC opined that it is difficult to proceed further without the complete information w.r.t details of amalgamation of mine lease, certified past production details from the inception of the mining operations and copies of the Consent to Operate (CTO). The EAC also observed that the Project Proponent/Consultant is again and again submitting the incomplete information. Thus the EAC was of the view that the instant proposal shall be considered further only after the submission of the complete information by the Project Proponent. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

i. The Project Proponent needs to submit the details of the chronology of the two mine leases and their amalgamation into single lease with supporting documents clearly mentioning the mine lease area also to clarify whether any amendment in EC has been obtained after renewal as a single mine lease during the year 2008.

ii. The Project Proponent needs to submit the certified past production details from the inception of the mining operation to 2011-12.

iii. The Project Proponent needs to submit the copies of the Consent to Operate (CTO) from its inception.

3.2.4. Deliberations by the EAC in current meetings

The EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project

Proponent informed the EAC that initially mining lease was granted under the mining lease no. 1564 for mining of gold and associated minerals over an area of 528.35 Ha (1305.6 Acres) for a period of 30 years from 20.12.1978 to 19.12.2008. Then, the second mining lease was granted under the mining lease no. 1734 for mining of Scheelite Mineral over an area of 528.35 Ha (1305.6 Acres) and the lease deed was executed on 17.03.1981 for the period coterminous with the original lease i.e., up to 19.12.2008. Further, the Project Proponent submitted that the ML no. 1564 and ML no. 1734 for mining of Gold and associated minerals and Scheelite Mineral respectively, renewed under the Mining Lease no. 2671 for mining of Gold, Scheelite and associated minerals on 26.03.2012 and it was effective from 19.12.2008. There was no amalgamation of mining lease of M L no. 1564 and M L no.1734. Further, the Project Proponent presented the certified past production details from the period 1948-49 to 2022-23. The Project Proponent also presented the details of the Consent to Operate (CTO) from its inception and the last CTO was obtained on 01.04.2023 which is valid upto 31.03.2025.

The EAC observed that the Project Proponent obtained Environmental Clearance on 17.11.2004 under EIA, 1994 and after that the Project Proponent did not obtain amendment in EC for inclusion of Gold, Scheelite and associated minerals. The EAC noted that as per Ministry's Notification dated 04.04.2011, *prior environmental clearance is as well required at the stage of renewal of mine lease for which application should be made up to one year prior to date of renewal*. The EAC also reiterated the judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Versus Union of India and Ors "*the renewal of a mining lease after 27th January, 1994 will require an EC even if there is no expansion or modernization activity or any increase in the pollution load*". The EAC noted that the Project Proponent obtained the renewal of mining lease on 26.03.2012 and at this stage Project Proponent required to obtain EC as per Ministry's Notification dated 04.04.2011. However, project proponent has not obtained the EC at the time of renewal of mine lease. Further, the EAC noted the Project Proponent did not submit the proposal under Ministry's Notification dated 06.04.2018 and 14.03.2017. Thus, the EAC opined that the instant proposal attracts the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors and violation of the EIA Notification, 2006. The EAC also observed that the Project Proponent submitted the proposal for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha. The EAC reiterated the Ministry's SOP notification dated 7th July, 2021, SOP for dealing with the violation cases:

Step 1: Closure or Revision:

S. No	Status of EC	Actions
1	If no prior EC has been taken	Order to close its operation
2	If prior EC is available for existing/old unit	Order to revert the activity/ production to permissible limits
3	If prior EC was not required for earlier production level but is now required	Restrict the activity/production to the extent to which prior EC was not required

Step 2: Action under Environment (Protection) Act, 1986:

Action under section 15 read with section 19 of the Environment (Protection) Act, 1986 shall be initiated against the violators.

The EAC was of the view that the Project Proponent needs to revert the activity/ production to permissible limits. The EAC asked the Ministry to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006 to M/s The Hutti Gold Mines Company Limited for production capacity of 0.6 MTPA and processing plant capacity of 0.9 MTPA in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

CCR	
1.	The Project Proponent needs to submit the latest Certified Compliance Report (CCR) by the Ministry's Regional Office at the time of appraisal of EC.
Efficacy of EMP	
1.	The Project Proponent needs to submit the efficacy and operational data of the EMP measures undertaken in the past.
Environment Monitoring & EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
2.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
Greenbelt and Plantation	
1.	
Groundwater	
1.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
2.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
3.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
Plan for ecology restoration	
1.	The Project Proponent needs to submit the ecology restoration plan.
Socio economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities. The Project Proponent also needs to submit the implementation status of the earlier public hearing concerns.
Study on socio economic	

1.	The Project Proponent needs to submit the comparison of data on the standards of the living of the local people after obtaining EC under EIA, 1994 and as on date. PP also needs to highlight the influence on the developmental activities that changed the standard of living of the local people.
2.	The Project Proponent needs to carry out the rapid study on need-based assessment for undertaking community development activities in nearby villages and conducting to achieve specific SDGs with the help of the local community. Based on the study/report, the Project Proponent shall prepare long-term sustainable development programs for their holistic development.
Survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC
Tailings management	
1.	The Project Proponent needs to submit the management plan for handling and management of tailings.
Violation	
1.	The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I(M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report,
Violation conditions	
1.	The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
2.	The Ministry has to initiate action under section 15 read with section 19 of the Environment (Protection) Act, 1986 against the project proponent. Further, no consent to operate to be issued till the project is granted EC. The action initiated by the State Govt./State PCB, status of the same may be submitted to the Ministry.
3.	Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
4.	Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
5.	The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants. vi. Details of benefit accrued during the violation period along with capital cost of the project needs to be submitted.
6.	The Project Proponent needs to submit the penalty provisions as per Ministry's SOP dated 07.07.2021 at the time of appraisal of EC.
7.	The Project proponent needs to comply with all the statutory requirements of the order of Hon'ble Supreme Court dated 2nd August 2017 in w.r.t. Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Waste water treatment methods	

1.	The Project Proponent needs to submit the treatment methods for mine water discharge and waste water containing heavy metals.

3.2.6.2. Standard

2(b)	Mineral beneficiation
null	
1.	The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.
1.	Details of the technology and process involved for beneficiation should be given. .
1.	Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.
1.	Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.
1.	Estimation of the fines going into the washings should be made and its management described.
1.	Details of the equipment, settling pond etc. should be furnished.
1.	Detailed material balance should be provided.
1.	Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.
1.	Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.
1.	The water requirement for the project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the project should also be indicated.
1.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.
1.	All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.
1.	All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.	It should be clearly indicated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
1.	Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.
1.	The study area will comprise of 10 km zone around the Plant.

1.	Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.
1.	Location of Railway siding with its handling capacity and safety measures should be indicated.
1.	Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.
1.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
1.	Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.
1.	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the Project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
1.	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
1.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
1.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
1.	A study shall be got done to ascertain the impact of the Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.
1.	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
1.	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
1.	Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.
1.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects, should be discussed in the report.
1.	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site- specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
1.	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
1.	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
1.	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished. .
1.	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
1.	Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to the pollution.
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.
1.	Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.
1.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area should be detailed.
1.	Public health implications of the Project and related activities for the population in the impact zone should be

	systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
1.	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
1.	Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.	A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.
1.	Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.
1.	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of project as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should also be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified Report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project by the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Majhgawan Diamond Mine of M/s. NMDC Ltd with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] within the mine lease area of 113.332 Ha (Main Lease) Located at Majhgawan, Tehsil & District Panna, Madhya Pradesh by NMDC LIMITED located at PANNA,MADHYA PRADESH			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/442288/2023	J-11015/120/2018-IA-II(M)	02/09/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

The instant proposal is for mining of Diamond in Majhgawan Diamond Mine with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] in the mine lease area of 113.332 Ha (Main Lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

1. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 02.12.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observation of EAC and compliance made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent																																							
1	The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.	The Project Proponent submitted that the baseline data was revalidated by collecting one-month fresh baseline data by new EIA Consultant M/s Ecomen Laboratories (P) Limited during the period of 1st October, 2023 – 30th October, 2023. The revalidation of baseline data was compared with initial baseline data generated during 01.12.2020 to 28.02.2021 and it was found that the revalidation of baseline data similar with previous baseline data and no major variations was observed during the recent study. The comparison of both the baseline data are as follows: - <table><tr><th colspan="5">Ambient Air Quality (9 locations)</th></tr><tr><th>S. No</th><th>Parameters</th><th>Winter 2020-21</th><th>Post Monsoon, 2023</th><th>Standards, $\mu\text{g}/\text{m}^3$</th></tr><tr><td>1</td><td>PM10</td><td>18.6-64.0</td><td>33.0 – 57.0</td><td>100</td></tr><tr><td>2</td><td>PM2.5</td><td>12.1-41.4</td><td>8.8 to 26.0</td><td>60</td></tr><tr><td>3</td><td>SO2</td><td>6.4 – 13.7</td><td>7.5 – 14.4</td><td>80</td></tr><tr><td>4</td><td>NO2</td><td>16.4 – 42.3</td><td>12.8 – 21.3</td><td>80</td></tr></table> <table><tr><th colspan="3">Ambient Noise levels</th></tr><tr><th>Location</th><th>Winter 2020-21</th><th>Post Monsoon, 2023</th></tr><tr><td> </td><td> </td><td> </td></tr></table>	Ambient Air Quality (9 locations)					S. No	Parameters	Winter 2020-21	Post Monsoon, 2023	Standards, $\mu\text{g}/\text{m}^3$	1	PM10	18.6-64.0	33.0 – 57.0	100	2	PM2.5	12.1-41.4	8.8 to 26.0	60	3	SO2	6.4 – 13.7	7.5 – 14.4	80	4	NO2	16.4 – 42.3	12.8 – 21.3	80	Ambient Noise levels			Location	Winter 2020-21	Post Monsoon, 2023			
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4	NO2	16.4 – 42.3	12.8 – 21.3	80																																					
Ambient Noise levels																																									
Location	Winter 2020-21	Post Monsoon, 2023																																							

	Lday	LNight	Lday	LNight
Mine View Point	54.8	51.6	43.3	36.1
Hopper/Jaw Crusher Plant	61.0	57.4	45.4	36.1
Near Explosive magazine	51.7	48.7	43.2	35.8
Time Office gate	43.8	40.7	49.9	37.0
Processing plant near cone crusher	53.8	50.7	47.6	36.7
Processing Plant near HMS	50.8	47.7	47.5	36.5
X – Ray Sorter Room	39.8	36.7	46.8	36.4
Workshop	45.8	42.7	51.8	37.3
Majhgawan township	43.2	39.3	52.8	38.6
Panna National park boundary	40.7	37.6	43.1	35.5
Bharat Mata Temple	43.8	40.6	52.5	38.3
Middle School, Hinauta Village	49.7	46.8	52.0	38.2
Inside Panna National Park near Hinouta elephant camp	37.8	34.7	51.3	37.7
Primary School, Kaimasan	36.7	33.8	51.5	37.6
Standards Day Time dB(A)	Industrial: 75, Commercial: 65 Residential: 55, Silent Zone: 50			

Standards Night Time dB(A)

Industrial: 70,
Commercial: 55 Resident
ial: 45,
Silent Zone: 40

Surface water quality (3 locations)

S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH at 25°C	6.84 – 7.11	7.08 -7.34
2	Total Dissolved solids, mg/l	258.3 – 301.8	322 – 373
3	Chloride as cl-, mg/l	43.5 – 47.2	26.0 – 34.0
4	Total Hardness, mg/l	92.6-115.6	116-144
5	COD, mg/l	<3.0	8 -16
6	BOD, mg/l	<5.0	2 – 2.5
7	Fluoride as F, mg/l	0.4-0.5	0.49-0.56
8	Sulphates as SO ₄ , mg/l	14.9-18.3	16.7-23.2

Ground water quality (7 locations)

S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH at 25°C	7.39 - 7.84	7.01 - 7.69
2	Total Dissolved solids, mg/l	335.1 - 539.4	446 – 612
3	Chloride as cl-, mg/l	29.4 - 70.5	40 – 75
4	Total Hardness, mg/l	184.3-294.8	204 – 280
5	Fluoride as F, mg/l	0.5 - 0.9	0.48 - 0.77

6	Sulphates as SO ₄ , mg/l	19.8 - 46.8	22 – 41

Soil quality (5 locations)			
S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH	7.16 – 7.89	7.24 – 7.77
2	Electrical Conductivity (µS/cm)	154 - 234	221 – 274
3	Organic Carbon (%)	0.25 – 0.32	0.36 – 0.57
4	Available Nitrogen as N (kg/Ha)	35.3 – 57.4	31.2 – 48.0
5	Available Phosphorus as P (kg/Ha)	14.6 – 28.4	12.7 – 20.2
6	Potassium (kg/Ha)	468 – 581.8	134 – 203

2

The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.

The Project Proponent submitted the legal opinion obtained from the Attorney-General for India on 23.11.2023. The Attorney-General for India has opined that the orders passed by the Supreme Court on 26.04.2023 and 28.04.2023 overrules all earlier orders is misconceived. As subsequent order cannot be said to have overruled an earlier order unless the earlier order is directly put to rest, considered and dealt with. There is no room for overruling by implication also unless the subjects of the two proceedings are common. The order passed by the Supreme Court on 30.11.2022 was with full knowledge and understanding about the national park aspect. It was on the strength of that order, that all statutory authorities applied their mind, more particularly on the need and relevance of the closure of the mining activities and its importance. As a result, the order dated 30.11.2022 may have to be treated as a standalone order. It cannot be compared to any other mining activity which has not obtained requisite clearances. Additionally, having regard to the nature of the mining activity and the mischief that may arise from the abandonment of the mining activity, leaving the mined area with all its exposures, would also be a distinguishing factor.

While on the prima facie reading on the two orders dated 26.04.2023 and 28.04.2023, do seem to suggest against undertaking mining activities within the prohibited areas, as already stated above in view of the clearance given by the Supreme Court, it appears to me that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted.

3

The EAC also opined that the Ministry may seek comments from

The ESZ Division gave their comments on 12.10.2023 stating that “Mining within ESZ is a prohibited activity. This has been reiterated by the Supreme Court Order dated 28.04.2023, irrespective of whether the mining is beyond 1.0 km from the boundary of the protected area, in case ESZ extends beyond 1.0 km.”
The comments of the Wildlife Division obtained on 19.11.2023 are as follows:-

the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

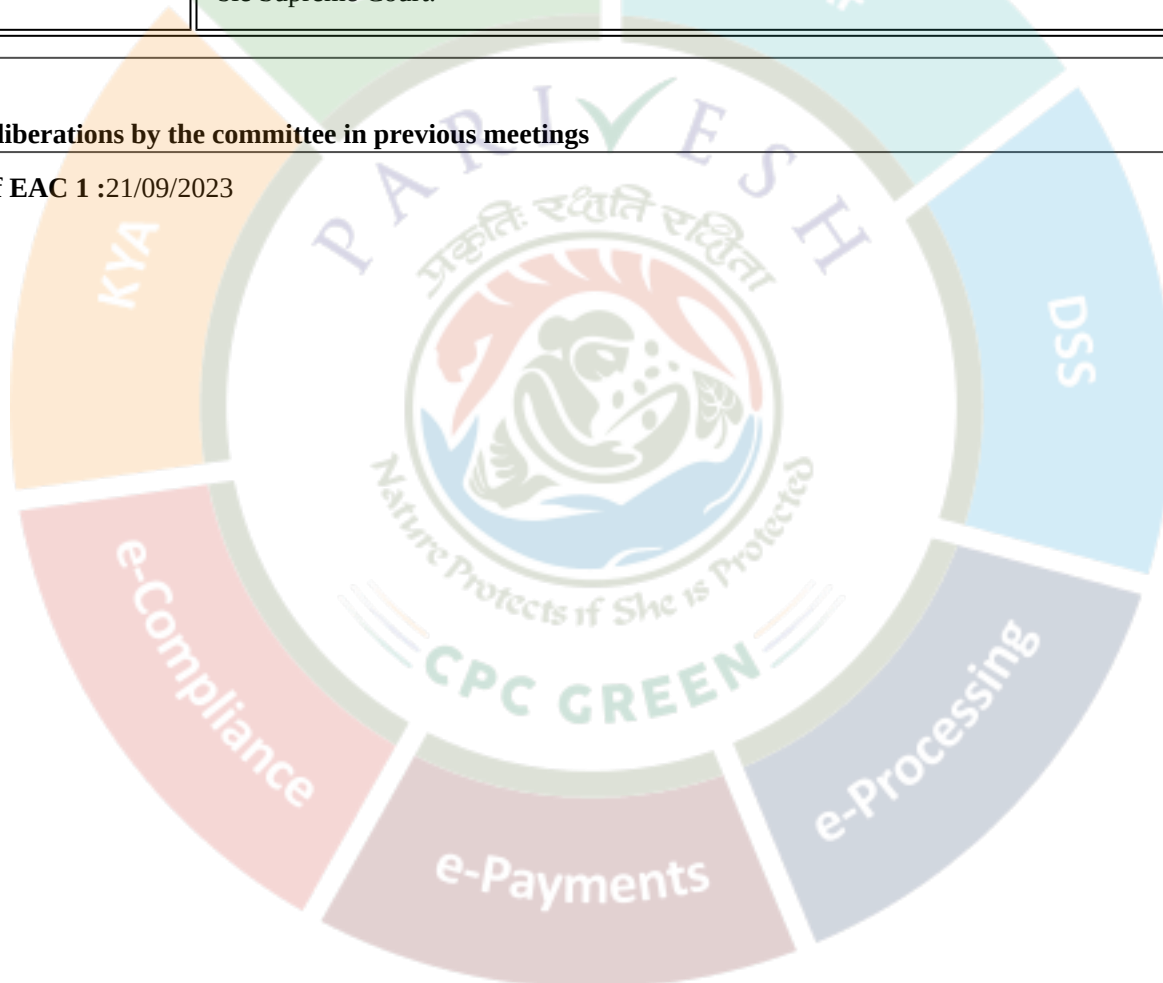
The proposal for wildlife clearance under the Wildlife (Protection) Act, 1972 of Majhgawan Diamond Mine of M/s NMDC Ltd was recommended by the Standing Committee of National Board for Wildlife in its 61st meeting held on 18th February, 2021 subject to the conditions imposed by the Chief Wildlife Warden and the National Tiger Conservation Authority. The recommendations of NTCA were subject to approval of Hon'ble Supreme Court. The Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve."

Subsequently, Hon'ble Supreme Court vide its order dated 26.04.2023 in IA 131377 of 2022 filed by the Ministry in W.P. (C) no. 202 of 1995 has directed that "*mining within the National Park and Wildlife Sanctuary and within an area of one kilometre from the boundary of such National Park and Wildlife Sanctuary shall not be permissible.*"

If any clarification is required on the matter, the IA Division may seek the same from Hon'ble Supreme Court."

3.3.3. Deliberations by the committee in previous meetings

Date of EAC 1 :21/09/2023



Deliberations of EAC 1 :

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- ii. The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- iii. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

3.3.4. Deliberations by the EAC in current meetings

The Member Secretary informed the EAC that officials from National Tiger Conservation Authority (NTCA) and Wildlife Division in the Ministry were invited as a Special Invitee to discuss the matter. The EAC asked the Project Proponent to brief about the legal aspects of Main and Supplementary mine lease. The Project Proponent briefed about the chronology of the legal aspects since from the grant of mining lease in the year 1965 to till the order of the Hon'ble Supreme court orders dated 26.04.2023 and 28.04.2023. The Project Proponent informed the EAC that at the time of sanction of grant of mining lease, the instant leases were outside the Panna (Gangau) Wildlife Sanctuary. The Panna Wildlife Sanctuary was notified in the year 1975 and later in the year 1994, the Govt. of India declared it as a Project Tiger Reserve. Then in the year 2005, the Director, Panna National Park informed that both the mine leases fall within Gangau Wildlife Sanctuary. Thereafter, the mining operations were suspended in the year 2005 and plant operations in the year 2006.

Further, the Project Proponent informed the EAC that EC was obtained in the year 2006 under EIA,1994 subject to acceptance by the Standing Committee of the National Board of Wildlife as well as permission from Hon'ble Supreme Court of India. The mining operations resumed in the year 2009 after obtaining all approvals and the permission was valid upto 31.12.2020. Again mining operations were stopped w.e.f 01.01.2021. In order to expedite the balance reserves, the application for renewal of Wildlife Clearance was submitted. The DIG, NTCA on 15.02.2021

conveyed the recommendations subject to fulfillment of conditions laid down by Chief Wildlife Warden (CWLW), Madhya Pradesh. The CWLW while forwarding the proposal to the Ministry specifically mentioned that the NMDC again should obtain the permission from the Hon'ble Supreme Court. Then, an IA was filed in the Hon'ble Supreme Court and the Hon'ble Supreme Court vide order dated 30.11.2022 stated that the present application deserves to be allowed and renewal of Wildlife Clearance was granted by CWLW on 24.02.2023. The Hon'ble Supreme Court vide its order dated 26.04.2023 and 28.04.2023 directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

The Project Proponent also briefed about the legal opinion obtained from the Attorney-General for India on 23.11.2023. The Attorney-General for India has opined that the orders passed by the Hon'ble Supreme Court on 26.04.2023 and 28.04.2023 over rules all earlier orders are misconceived. The order passed by the Supreme Court on 30.11.2022 was with full knowledge and understanding about the national park aspect. A subsequent order cannot be said to have overruled an earlier order unless the earlier order is directly put to rest, considered and dealt with. Also, there is no room for overruling by implication also unless the subjects of the two proceedings are common. Therefore, the order dated 30.11.2022 may have to be treated as a standalone order. It cannot be compared to any other mining activity which has not obtained requisite clearances. In view of the clearance given by the Supreme Court, it appears to that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted. The EAC noted that the Wildlife Division has informed that if any clarification is required on the matter, the IA Division may seek the same from Hon'ble Supreme Court. The officials of NTCA and Wildlife Division opined that the instant file may be sent to the NTCA to offer further comments in the instant matter.

The Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The Project Proponent explained about the site features in the main mine lease area. The Project Proponent showed the existing working pit of 120m deep. The mining operations mainly will be carried out in the main mine lease and plant operations will be carried out in the supplementary mine lease for recovery of diamonds. Tailing pond is partly located within main mine lease and partly in supplementary mine lease. Water is re-circulated into the plant. The Project Proponent showed the processing plant, existing coarse tailing dumps, existing and proposed waste dumps and ore stack yard. The main mine lease does not involve forest land and the supplementary mine lease involves forest land of 74.018 ha and the Forest Clearance is co-terminus with extended lease period up to 30/6/2040. Water will be utilized from water reservoir built by NMDC. Renewal application was made to CGWA for obtaining approval for dewatering of 321.0 KLD and the same is awaited.

The Project Proponent informed the EAC that baseline data was conducted during December, 2020 – February, 2021 (Winter Season) and then revalidated by collecting one-month fresh baseline data by new EIA Consultant M/s Ecomen Laboratories (P) Limited from 1st October, 2023 – 30th October, 2023. The revalidation of baseline data was compared with initial baseline data generated during 01.12.2020 to 28.02.2021 and it was found that the revalidation of baseline data similar with previous baseline data and no major variations was observed during the recent study. Till date about 1.95 Lakhs saplings have been planted including both the leases as well as in surrendered areas. The monitoring committee suggested to remove the exotic species. No R&R issues are involved. The action plan for removal of exotic species is yet to be approved by PTR. Total height of dump will be around 25-30 m. The EAC asked the Project Proponent to ensure that no washouts should reach the village. The total excavated area will be 23.576 ha, out of which 3.07 ha will remain as water body at lower benches and the remaining area of 20.506 ha will be covered under plantation. OB & Tailing dump, mineral storage and infrastructure will also be covered under plantation. After removal of tailings, the tailing pond will be developed as a rain water reservoir. No backfilling is envisaged. Advertisement for public consultation was advertised on 20.07.2023 and the Madhya Pradesh Pollution Control Board vide letter dated 22.08.2023 forwarded the objections/suggestions received. The main concerns of the locals were related to drinking water, skill development, improvement of facilities etc., The budget proposed to address the concerns works out to be Rs. 252 lakhs for both main mine lease and supplementary mine lease. A capital cost of Rs 342 Lakhs and a recurring cost of Rs 54.5 Lakhs have been earmarked towards Environment Management Plan. The Project Proponent explained about the processing of plant operations. The EAC asked the Project Proponent whether any chemical is added during mineral processing. The Project Proponent informed the EAC that ferro silicon is added to maintain the density.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC opined that the Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals.
- ii. The Ministry to seek comments from National Tiger Conservation Authority (NTCA) and Wildlife Division in the instant matter.

3.3.5. Recommendation of EAC

Deferred for ADS

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Majhgawan Diamond Mine of M/s. NMDC Ltd for 0.72 LTPA of overburden removal and processing of kimberlite ore (8 LTPA) for production of 1.00 lakh carats of Diamond per annum within mine lease area of 162.631 Ha (Supplementary Mine Lease) Located at Majhgawan, Tehsil & District Panna, Madhya Pradesh by NMDC LIMITED located at PANNA,MADHYA PRADESH			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/442291/2023	J-11015/121/2018-IA-II(M)	02/09/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

The instant proposal of M/s NMDC Ltd. is for mining of Diamond in Majhgawan Diamond Mine for 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamond per annum in the mine lease area of 162.631 Ha (Supplementary mine lease), located at Village Majhgawan, District Panna, Madhya Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

1. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information. Then the Project Proponent submitted the information on 02.12.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observation of EAC and compliance made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent
1	The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the	The Project Proponent submitted that the baseline data was revalidated by collecting one-month fresh baseline data by new EIA Consultant M/s Ecomen Laboratories (P) Limited during the period of 1st October, 2023 – 30th October, 2023. The revalidation of baseline data was compared with initial baseline data generated during 01.12.2020 to 28.02.2021 and it was found that the revalidation of baseline data similar with previous baseline data and no major variations was observed during the recent study. The comparison of both the baseline data are as follows: - Ambient Air Quality (9 locations)

acts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.

S. No	Parameters	Winter 2020-21	Post Monsoon, 2023	Standards, $\mu\text{g}/\text{m}^3$
1	PM10	18.6-64.0	33.0 – 57.0	100
2	PM2.5	12.1-41.4	8.8 to 26.0	60
3	SO ₂	6.4 – 13.7	7.5 – 14.4	80
4	NO ₂	16.4 – 42.3	12.8 – 21.3	80

Ambient Noise levels				
Location	Winter 2020-21		Post Monsoon, 2023	
	Lday	LNight	Lday	LNight
Mine View Point	54.8	51.6	43.3	36.1
Hopper/Jaw Crusher Plant	61.0	57.4	45.4	36.1
Near Explosive magazine	51.7	48.7	43.2	35.8
Time Office gate	43.8	40.7	49.9	37.0
Processing plant near cone crusher	53.8	50.7	47.6	36.7
Processing Plant near HMS	50.8	47.7	47.5	36.5
X – Ray Sorter Room	39.8	36.7	46.8	36.4
Workshop	45.8	42.7	51.8	37.3
Majhgawan township	43.2	39.3	52.8	38.6

Panna National park boundary	40.7	37.6	43.1	35.5
Bharat Mata Temple	43.8	40.6	52.5	38.3
Middle School, Hinauta Village	49.7	46.8	52.0	38.2
Inside Panna National Park near Hinouta elephant camp	37.8	34.7	51.3	37.7
Primary School, Kaimasan	36.7	33.8	51.5	37.6
Standards Day Time dB(A)	Industrial: 75, Commercial: 65 Residential: 55, Silent Zone: 50			
Standards Night Time dB(A)	Industrial: 70, Commercial: 55 Residential: 45, Silent Zone: 40			

Surface water quality (3 locations)			
S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH at 25°C	6.84 – 7.11	7.08 -7.34
2	Total Dissolved solids, mg/l	258.3 – 301.8	322 – 373
3	Chloride as cl-, mg/l	43.5 – 47.2	26.0 – 34.0
4	Total Hardness, mg/l	92.6-115.6	116-144
5	COD, mg/l	<3.0	8 -16
6	BOD, mg/l	<5.0	2 – 2.5
7	Fluoride as F, mg/l	0.4-0.5	0.49-0.56

8	Sulphates as SO ₄ , mg/l	14.9-18.3	16.7-23.2

Ground water quality (7 locations)

S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH at 25°C	7.39 - 7.84	7.01 - 7.69
2	Total Dissolved solids, mg/l	335.1 - 539.4	446 - 612
3	Chloride as Cl ⁻ , mg/l	29.4 - 70.5	40 - 75
4	Total Hardness, mg/l	184.3-294.8	204 - 280
5	Fluoride as F, mg/l	0.5 - 0.9	0.48 - 0.77
6	Sulphates as SO ₄ , mg/l	19.8 - 46.8	22 - 41

Soil quality (5 locations)

S. No	Parameters	Winter 2020-21	Post Monsoon, 2023
1	pH	7.16 - 7.89	7.24 - 7.77
2	Electrical Conductivity (μS/cm)	154 - 234	221 - 274
3	Organic Carbon (%)	0.25 - 0.32	0.36 - 0.57
4	Available Nitrogen as N (kg/Ha)	35.3 - 57.4	31.2 - 48.0
5	Available Phosphorus as P (kg/Ha)	14.6 - 28.4	12.7 - 20.2
6	Potassium (kg/Ha)	468 - 581.8	134 - 203

2

The EAC opined that the P

The Project Proponent submitted the legal opinion obtained from the Attorney-General for India on 23.11.2023. The Attorney-General for India has opined that the orders passed by t

	project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.	he Supreme Court on 26.04.2023 and 28.04.2023 overrules all earlier orders is misconceived. As subsequent order cannot be said to have overruled an earlier order unless the earlier order is directly put to rest, considered and dealt with. There is no room for overruling by implication also unless the subjects of the two proceedings are common. The order passed by the Supreme Court on 30.11.2022 was with full knowledge and understanding about the national park aspect. It was on the strength of that order, that all statutory authorities applied their mind, more particularly on the need and relevance of the closure of the mining activities and its importance. As a result, the order dated 30.11.2022 may have to be treated as a standalone order. It cannot be compared to any other mining activity which has not obtained requisite clearances. Additionally, having regard to the nature of the mining activity and the mischief that may arise from the abandonment of the mining activity, leaving the mined area with all its exposures, would also be a distinguishing factor. While on the prima facie reading on the two orders dated 26.04.2023 and 28.04.2023, do seem to suggest against undertaking mining activities within the prohibited areas, as already stated above in view of the clearance given by the Supreme Court, it appears to me that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted.
3	The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.	The ESZ Division gave their comments on 12.10.2023 stating that “Mining within ESZ is a prohibited activity. This has been reiterated by the Supreme Court Order dated 28.04.2023, irrespective of whether the mining is beyond 1.0 km from the boundary of the protected area, in case ESZ extends beyond 1.0 km.” The comments of the Wildlife Division obtained on 19.11.2023 are as follows:- The proposal for wildlife clearance under the Wildlife (Protection) Act, 1972 of Majhgawan Diamond Mine of M/s NMDC Ltd was recommended by the Standing Committee of National Board for Wildlife in its 61st meeting held on 18th February, 2021 subject to the conditions imposed by the Chief Wild Life Warden and the National Tiger Conservation Authority. The recommendations of NTCA were subject to approval of Hon’ble Supreme Court. The Hon’ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.” Subsequently, Hon’ble Supreme Court vide its order dated 26.04.2023 in IA 131377 of 2022 filed by the Ministry in W.P. (C) no. 202 of 1995 has directed that “mining within the National Park and Wildlife Sanctuary and within an area of one kilometre from the boundary of such National Park and Wildlife Sanctuary shall not be permissible.” If any clarification is required on the matter, the IA Division may seek the same from Hon’ble Supreme Court.”

3.4.3. Deliberations by the committee in previous meetings

Date of EAC 1 : 21/09/2023

Deliberations of EAC 1 :

The Project Proponent has informed the EAC that they have changed the EIA Consultant of M/s Vimta Labs Ltd to M/s Ecomen Laboratories Ltd. The Project Proponent also informed the EAC that M/s Vimta Labs Ltd has given no objection certificate dated 15.09.2023 to M/s NMDC to appoint any other Accredited EIA Consultant for the above said project. The new EIA Consultant, M/s Ecomen Laboratories Pvt Ltd has also given an undertaking vide letter dated 16.09.2023 stating that they have gone through the content and data of Final EIA/EMP Report. The EAC noted that the new EIA Consultant has given an undertaking at an interval of one day only. The EAC was of the view that the new EIA Consultant, M/s Ecomen Laboratories Ltd has to revalidate the baseline data for one month to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality.

The EAC also noted that the mine lease area is located within the Gangau Wildlife Sanctuary of Panna Tiger Reserve. The Project Proponent has informed the EAC that the Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.

The PCCF (Wildlife) / Chief Wildlife Warden, Bhopal, Madhya Pradesh vide letter no: 1608 dated 24/2/2023 has accorded approval for renewal / extension of Wildlife clearance under Wildlife (Protection) Act, 1972 over 275.963 Ha (main and supplementary mining lease area) lease falling in Gangau sanctuary under Panna Tiger reserve and for mining in an area of about 10 Ha (of which 1.5 Ha is forest area) for a period of 20 years which is valid upto 30/6/2040.

The EAC noted the recent orders of the Hon'ble Supreme Court dated 26.04.2023 and 28.04.2023 wherein it has been directed that *"any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area"*.

In view of the above, the EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the aforesaid orders in this instant proposal. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to revalidate the baseline data by collecting one-month fresh baseline data by new EIA consultant to ascertain the facts and figures presented in the EIA report and also to ascertain the ground reality. The Project Proponent also needs to submit the comparison of both baseline data.
- ii. The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.
- iii. The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.

3.4.4. Deliberations by the EAC in current meetings

The instant proposal of supplementary mine lease was appraised together with main mine lease as both the mine leases are contiguous. After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC opined that the Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 for the instant proposals. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals.
- ii. The Ministry to seek comments from National Tiger Conservation Authority (NTCA) and Wildlife Division in the instant matter.

3.4.5. Recommendation of EAC

Deferred for ADS

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Block 1- Bicholim Mineral Block for Iron Ore by VEDANTA LIMITED located at NORTH GOA,GOA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/GA/MIN/442593/2023	IA-J-11015/3/2023-IA-II(NCM)	01/09/2023	Mining of minerals (1(a))

3.5.2. Project Salient Features

The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and appraised at the Central level.

ii. The mine lease area is located between Latitude: 15°34’20.518”N to 15° 36’54.018”N and Longitude: 73°54’4.754”E to 73°57’09.51”E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.

iii. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information and site visit report of the subcommittee. Accordingly, site visit was carried out during 29-31 October, 2023 and then the Project Proponent submitted the information along with compliance of site visit report on 04.12.2023 in Parivesh portal and hence the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observations of sub-committee during site visit (29-31 October, 2023), the project proponent provided the following compliances:-

S. No	Observation of subcommittee during site visit held during 29-31 October, 2023	Reply by Project Proponent
1	The Project Proponent needs to submit the techno economic feasibility report for laying Over Land Belt Conveyor (OLBC) from	The Project Proponent submitted that transportation route from mine site to jetty currently covers a total distance of 5.48 kms (4.54 dedicated road and 0.94 km MDR-20 Public Road). Based on the present capacity of the tippers, 1205 trips are required per day and the present road network is adequate for the purpose with widening and strengthening of some patches. The preliminary Techno-Economic feasibility study has been undertaken and prima facie it does not look feasible to switchover to OLBC system considering the terrain of the likely route having mounds and low-lying areas, vegetation/forest patches and its likely degradation, accessibility, environmental impacts and safety issues, technologies available, cost of the system, implementation period vis-a-vis remaining reserves in the mining lease. The Project Proponent also submitted the preliminary Techno-Economic feasibility issues for

	the mine lease area to Sarmanas Jetty.	laying Over Land Belt Conveyor (OLBC) from the mine lease area to the Sarmanas Jetty along with cost and timeline comparison for conveyor system and dedicated road.
2	The subcommittee asked the Project Proponent to submit the ecology restoration plan for mined out pits for using as Water reservoir/Pisciculture.	The Project Proponent submitted that the Ecology Restoration or Mine Reclamation activities at Block I Bicholim Mineral block will be carried out concurrently with mining operations. The company has in-house experienced team having experience of mine land reclamation. The company also proposes to collaborate and take support of various reputed institutes and consultancy firms in ecology restoration of the area more importantly the local stakeholders will be consulted in the process of ecology restoration. The Project Proponent also submitted that at conceptual stage, 20 ha area will be converted into water reservoir & 293.5 ha will be converted into backfilled area. Backfilled area will be reclaimed & rehabilitated by the plantation. At conceptual stage around 105 ha (21.94% of the total project area) of land will be brought under plantation. The plantation will comprise of saplings of native species which are generally grown in the state of Goa. The plantation would be a mix of various forest and fruit tree species and technical advice would be taken from state forest and agriculture departments. The saplings will be procured from various nurseries like forest department nursery, nurseries developed by locals and also from companies in-house root trainer nursery. Further, the Project Proponent submitted that the Block-I Bicholim Mineral Block is already having a 7.5m wide green belt all along the mine block boundary except the areas where the mine block shares a common boundary with adjoining mine block. A 50m green belt exists towards the habitation within the lease and the same would be further strengthened and maintained. A dedicated 200m green belt would be developed and maintained towards the Idgah area. A density of 2500 saplings per ha will be maintained. Extensive plantation would also be done along the sides of connecting roads. The waste dump slopes will be covered with laterite material and then with biodegradable geotextile mats which will prevent soil erosion of the dump slopes and thus will facilitate the growth of native species. Grass seeds will be sprinkled on the dump slopes so that the same germinate during rains. The top of dump areas / levelled areas will be properly planned and developed into theme based gardens which can be an attraction for school students, tourists etc. Some of the mined-out pits will be partially backfilled and retained as water bodies. For instance, 1 Top pit and 5 Bottom pits will be finalized by end of first mine plan period and will be taken up for ecology restoration initiatives. The company will collaborate with state fisheries department to develop Pisciculture in the water body developed in the mine pits. Local youth will be provided training through the fisheries department so that they manage and maintain the Pisciculture project.
3	The subcommittee noted that the transfer of material from one pit to other working pit will lead to transportation issues. The subcommittee asked the Project Proponent to i	The Project Proponent submitted that as suggested by the Hon'ble Committee detailed study of mineral transportation from one pit to another pit including sequential mining has been carried out. The company has explored the possibility of concurrent backfilling and it will be possible only from 5th to 10th year. The Project Proponent submitted the google image showing the existing available pits for backfilling and proposed pits for backfilling. The Project Proponent also submitted the details of existing pits, area, depth and volume for backfilling and also the proposed working pits, area, depth and volume available for backfilling. Further, the Project Proponent submitted the year wise sequential mining & backfilling plan.

	identify the shortest lead distance and also to explore the possibility of concurrent backfilling. The Project Proponent also needs to submit the sequential stage wise mining in top and bottom working pits and their backfilling plan.	
4	The Project Proponent needs to submit the action plan for strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge. The action plan for monitoring the water level and water quality before discharge needs to be submitted.	The Project Proponent submitted that at conceptual stage, total 12 nos of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds. The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M3 of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M3. Further, the Project Proponent submitted that entire monsoon runoff is channelized into mine pits and supernatant water flows into series of settling ponds through drains. The clear water is allowed to naturally overflow by Header arrangements or through check dams. In case required, Lime or combination of Lime and flocculent is used in the mine pit or settling pond so that the particles settle, and clear water is discharged. The discharge water is monitored regularly so that water quality meets the prescribed limits. The inhouse Environment management cell will undertake the regular monitoring and analysis of discharge water through Environment laboratory recognized by MoEF&CC. The monitoring reports will be submitted to Goa State Pollution Control Board on monthly basis and MoEF&CC Regional office on six monthly basis. Surface water samples shall be collected at 8 locations which include all the mine discharge points and upstream and downstream of Bicholim and Asnora river. Samples shall be collected once a month. The parameters listed in IS: 2296 shall be monitored. During monsoon season, in addition to the monthly monitoring, all the discharge points will be regularly monitored (on all the rainy days) and the TSS levels will be checked.
5	The design of garland drain around the was	The Project Proponent submitted that the dimensions of the drains will be maintained with width of 2m and 1.5 m in depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get overflowed from the drains. The available garland drains are 11313 m in length which covers all the dumps within the mine lease

te dumps to divert the water to settling ponds and the measures to be taken to arrest the suspended solids needs to be submitted. The measures to be taken for preventing the soil erosion on slope of waste dumps need to be submitted.

area. The same will be strengthened and maintained before the onset of monsoon. The daily average surface run-off is estimated as 14003 m³. The garland drains have the capacity to accommodate instant volume of 33939 m³ as per above dimensions. Therefore, garland drains capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. Therefore, water management structures comprising of drains, settling ponds and mined out pits are available as well as planned to address the catchment area run-off for conceptual period.

The Project Proponent also submitted the measures to be taken to arrest the suspended solids and for preventing the soil erosion on slopes of waste dumps for preventing the soil erosion on slope of waste dumps which are as follows:

1. Inward slope will be provided to all the dump benches so that the water doesn't flow over the slope and erodes the dump slope surface
2. Covering the finalised dump slope with lateritic material and then covering with coir geotextiles
3. Use of ERW pipes between benches to channelise the surface runoff water and diverting to settling ponds.
4. Boulder walls 1.5m ht and 2m wide will be provided at the toe of the dump to arrest the flow of silt.
5. Garland drains around the dump is constructed 1m bottom width, 2m top width and 1m deep with a length of 6100 m to divert water to settling pond for arresting the suspended solids.
6. Use of Stylo grass seeds and Glyricidia cuttings at the onset of monsoon to create green cover on the dump slopes.
7. Annual Plantation of native species on waste dump.
8. Safety green belt /barrier of 50 mts shall be maintained near the Assonora river from the mine pit.
9. Annual de-siltation of the settling ponds, drains.
10. Use of lime and flocculants in case required so as to settle the suspended solids in settling pond.

6

The Project Proponent needs to submit the action plan for installing permanent water sprinklers.

The Project Proponent submitted that permanent water sprinklers with 3.40 km length along the haul road within the ML area and 2.80 km length outside the ML area on either side of the road will be installed. Sprinklers will be spaced at 12m distance covering 6m radius at 180 degree. Estimated budget for the installation of the same is Rs. 191.60 Lakhs.

S. No	Description	Cost (Rs. In Lakh)
1	Civil Works	20.0
2	Pump & Sprinkler System	88.0
3	Pipeline	75.60
4	Electrical Works	8.0
	Total	191.60

The Project Proponent also submitted the map showing the layout of proposed water sprinklers within mine lease area and along dedicated road.

7

The Project Proponent

The Project Proponent submitted that Crushing & screening units will be modified within 4 months after obtaining the Clearances. Budget proposed for the same is Rs. 6.97 Crore. The Pro

	t needs to submit the action plan and timeline to modify the crushing and screening units. The Project Proponent also needs to submit the material flow sheet and material balance.	ject Proponent also submitted the flow Sheet of Crushing & Screening Unit.
8	The Project Proponent needs to submit the action plan for developing their own nursery by mentioning the details of the area to be covered, species to be planted and budget proposed. Most of the standing vegetation in the lease area constitutes of <i>Acacia auriculiformis</i> and <i>Casuarina equisetifolia</i> and it is further invading the open areas through natural regeneration. The invasion may be checked through planting native species in the region.	The Project Proponent submitted that it is proposed to develop nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village). Around 1100 sq.m of area will be utilized for the nursery. A budget of Rs. 5 lakh is kept for the same. The nursery will comprise of following: 1. A poly house/ nursery shed will be developed where in a root trainer nursery will be established. 2. Production area wherein various jobs like filling of root trainers/polybags will be undertaken store room wherein the nursery equipment's will be stored 3. Only native / local species of various horticultural and forest species will be grown in inhouse nursery or sourced from forest department nursery for planting in the finalised areas within the Mineral block. 4. Necessary technical support will be taken from state forest department. Company also carries out collaborative mine reclamation projects in association with research institutes like NEERI, Goa university etc. 5. Horticultural species like Mango, Cashew, Ber, Aonla, Jambul, Tamarind, Jackfruit, citrus species, etc will be grown 6. Forest species like various <i>Terminalia tomentosa</i>, <i>Terminalia bellerica</i>, <i>Bauhinia</i> species, Teak, <i>Cassia fistula</i>, Arjun, Assan, <i>lagerstromia</i> species, Shiwan, <i>Ficus</i> species, <i>Pongamiapinnata</i>, Reetha, Rain tree, Pangara, <i>Peltoforum</i>, Palas, Saton, Mahagony, bamboo species etc. The Project Proponent also submitted that during plan period an area of 9.7288 ha (24,322 no. of plants) will be developed under 7.5m safety zone, Buffer towards habitation, archaeological site, & river and an area of 9.4435 ha (23,609 no. of plants) will be developed on backfilled area. A budget of Rs 28.83 Lakhs has been earmarked towards the same.

9

The Project Proponent needs to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022 or not. Accordingly, the Project Proponent shall submit the revised authenticated Schedule-I species. The Project Proponent also needs to submit the breakup of the conservation activities proposed under Wildlife Conservation Plan.

The Project Proponent submitted that the authenticated list of Schedule I Species as per Indian Wildlife Protection Act 1972 as amended Gazette Notification of Wildlife (Protection) Amendment Act, 2022 has been obtained from the Dy. Conservator of Forests Wildlife & Eco-Tourism (North), Panji-Goa vide letter no. 1-576-WL&ET(N)/2023-2024/3312, dated 27.11.2023. According to this authenticated list, 29 Schedule I Species have been recorded within 10 km study area.

As suggested by the Hon'ble EAC the company revised the break-up of conservation activities proposed under Wildlife Conservation Plan and same will be finalized after discussion with the Forest Dept. The break-up of the conservation activities proposed under Wildlife Conservation Plan are as follows:-

S. No	Particulars	1st year	2nd year	3rd year	4th year	5th year
1	Enrichment of forest areas with suitable indigenous species for wild life habitat improvement					
2	Creation/ maintenance of habitat for herbivores/ avian fauna					
3	Management interventions for facilitating water availability to the wild life in forest areas/ Improvement of soil and water regime of forest areas	12	12	12	12	12
4	Financial support to the department for conducting awareness campaigns for various stakeholders					
5	Financial support to the department for celebrating events like Wildlife week and sponsoring the prizes for the competitions					
	Total	Rs 60.0 Lakhs				

10

The Project Proponent needs to submit the map demarcating the surface features in the mine lease area and their safety d

The Project Proponent submitted the map demarcating the surface features in the mine lease area. The Project Proponent also submitted the safety distances left/maintained as per mines acts and rules as given below in table:

S. No	Features inside lease	Distance from Ultimate Pit Limit (UPL)	Statutory Distances as per MM R
1	ManasbagMulgao vill	120 m	

instances left/maintained as per mines acts and rules.

	age		45 m
2	Mulgao village	58 m	
3	Lamgao village	56 m	
4	Manaswada Govt. School within habitation	138 m (12 Students)	
5	Gaonkarwada Govt. School within habitation	190 m (not functional)	45 m
6	Old Lairai Temple	126m (From 5 Bottom Backfilling site)	
7	Mahadev&Sateri Temple	280 m	
8	Kelbai Temple	205 m	
9	Sateri Temple	130 m	45 m
10	Matrai Temple	150 m	
11	Nimuzgah	210 m	
12	Lamgao Caves	300 m	45 m

The Project Proponent needs to provide proper treatment of channels and nallas flowing in the lease area for soil and water conservation. Scientifically designed and placed check dams and other engineering structure

The Project Proponent submitted that Silt load study was carried out through Center for Advanced studies department of geology, University of Delhi and it was concluded that, all the structures made for the settling of sediments are found to be more than sufficient to accommodate sediments even during peak rainfall. The Project Proponent submitted that the

1. Total length of the Garland drain = 11313 m
2. Peak rainfall = 154 mm/day
3. Peak runoff in a day = 110590 m³
4. Capacity of garland drain = 33939 m³.

The garland drains are made such that from upstream to the downstream where the drains are meeting the settling ponds will show decrease in elevation, to maintain a free-flowing gradient of rainfall runoff. The dimension of the drains is maintained to be 2m in width and 1.5m in depth at everywhere in the mine site. A proper height has been maintained on the sides of the garland drain so that water don't get over-flooded from the drain.

	s at different places can help control the erosion and loss of productive soil. Necessary study from competent institution/ individuals may be done for this purpose.																																											
S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent																																										
1	The site visit report of the subcommittee.	The Project Proponent submitted the observations to the subcommittee recommendations during the site visit 29-31Oct., 2023 are complied and submitted in Parivesh portal.																																										
2	The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.	The Project Proponent submitted that 5 numbers of earlier mined out pits have been identified for backfilling purpose to accommodate waste to be generated in future besides additional pits to be made available progressively with mining till conceptual period. The physical details of available pits to be converted into backfilled areas are as follows: <table><tr><th>Mine pit location/ ID</th><th>Total area of pit (ha)</th><th>Area Available for Backfilling (Ha)</th><th>Depth (m)</th><th>Top RL (m)</th><th>Bot RL (m)</th><th>Vol (m³)</th></tr><tr><td>1 Top</td><td>22.4367</td><td>20.9942</td><td>99</td><td>62</td><td>-37</td><td>19356183</td></tr><tr><td>2 Top</td><td>13.0803</td><td>9.9465</td><td>60</td><td>60</td><td>0</td><td>2968920</td></tr><tr><td>3 Top</td><td>16.0596</td><td>13.1650</td><td>70</td><td>110</td><td>40</td><td>2240000</td></tr><tr><td>¾ Bottom</td><td>-</td><td>-</td><td>109</td><td>102</td><td>-7</td><td>-</td></tr><tr><td>5 Top</td><td>37.024</td><td>35.7242</td><td>78</td><td>98</td><td>50</td><td>142</td></tr></table>	Mine pit location/ ID	Total area of pit (ha)	Area Available for Backfilling (Ha)	Depth (m)	Top RL (m)	Bot RL (m)	Vol (m ³)	1 Top	22.4367	20.9942	99	62	-37	19356183	2 Top	13.0803	9.9465	60	60	0	2968920	3 Top	16.0596	13.1650	70	110	40	2240000	¾ Bottom	-	-	109	102	-7	-	5 Top	37.024	35.7242	78	98	50	142
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5 Top	37.024	35.7242	78	98	50	142																																						

	2					131 24
5 Top CB	-	-	77	124	47	-
5 Botto m	15.419 6	12.0840	92	87	-5	703 524 0
Total	104.02 04	91.9139				458 134 67

Further, the details of pits to be made available progressively with mining till conceptual period and converted into backfilled areas are as follows:

Mine pit lo cation/ ID	Total area of pit (ha)	Area A vailab le for Bac kfilling (Ha)	Dep th (m)	Top RL (m)	Bot RL (m)	Vol (m ³)	Void a vailabil ity for backfil ling
2 Top	43.1 944	39.2331	116	91	-25	105 189 96	5th yea r
¾ Bot tom	39.4 606	34.6140	169	102	-67	154 126 43	End of 3rd yea r
2 Top	68.5 2	65.6420	113	103	-10	479 120 00	6th to 10th ye ar
3 To p/2 T op co mbine d	38.2 545	36.6500	118	108	-10	381 612 00	11th to 13th ye ar
4 To p/3 T op Co mbine d	-	-	84	73	-11	-	11th to 13th ye ar
5 Top CB Pi t	-	-	168	94	-74	-	11th to 13th ye ar

Total	189.425	176.1391				112004839	

As shown in the above tables, five numbers of earlier worked out pits will have void volume of 45.81 million m³ and during the Plan & Conceptual period progressive excavation, 112 million m³ of void volume will be available for backfilling. Therefore, a total of 157.98 million M³ of void volume will be available for backfilling in mined out pits having a cumulative area of 268.05 Ha. Additionally, area of 62 Ha will be available as voids including 22 ha of water reservoir for storing rain water.

The Project Proponent also submitted that the Conceptual waste generation shall be 124.9 million CuM which will have a swelled volume of 149.90 million CuM (say 150 million CuM). The 0.2 million CuM of swelled waste will be dumped over top of backfilled pits as surface dumps. Sufficient space is available to accommodate waste generated during life of mine considering swell factor of 1.2. Annual waste generation is in range of 4.35 to 12.58 million cum per year with an average of 9.61 million cum per year considering life of the mine as 13 years based on the presently available mineable reserves. Life of the mine may reach upto 30 years if entire resources are converted to reserves by removing all encumbrances.

The Project Proponent submitted that at conceptual stage, total 12 nos of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds.

The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M³ of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M³.

The Project Proponent needs to submit the design of settling ponds by considering the annual rain fall, catchment area and its discharge.

3

Particulars	Details
Catchment area of pits	160 ha
Rainfall received	160 ha x 3500 mm = 5.6 Million CuM
Effective surface runoff to be accumulated in voids	5.6 x 0.7 = 3.92 Million CuM
Pits water holding capacity	5.49 Million CuM
Gross settling ponds capacity	1.90 Million CuM
Total water holding capacity of mined pits	7.39 Million CuM

and settling ponds

Further, the Project Proponent submitted that since total water holding capacity in pits and settling ponds (7.39 Million CuM) is more than rainfall and surface runoff volume from catchment (3.92 Million CuM), there is sufficient space for effective surface runoff management in during extreme precipitation times. The dimensions of the drains to be maintained will be 2 m in width and 1.5 m in depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get over-flooded from the drains. The available garland drains are 11313 m in length and daily average surface run-off is estimated as 14003 m³. The garland drains have capacity to accommodate instant volume of 33939 m³ as per above dimensions. Therefore, garland drains capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. Therefore, water management structures comprising of drains, settling ponds and mined out pits are available as well as planned to address the catchment area run-off for conceptual period. The overflow discharge water will be regularly monitored so that quality of water is maintained as per the prescribed standards and always clear water from ponds / pits meet the natural system. In case required, water treatment would be done in the pits by using lime and flocculants or other organic chemicals.

The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the trucks so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road

The Project Proponent submitted the map showing the transportation route comprising of dedicated road corridor and public road. The total travel distance upto Jetty is 5.48 kms (4.54 km dedicated road and 0.94 km MDR-20 Public Road). Traffic load and effective distance between two trucks are as follows:-

S. No	Transportation working days	Quantity (In TPA)	Tonnes/Day	Trips per day	Mode of transport
1	237	30,00,000	12658	1205	Road
Total Trips per day				1205	

The Road width details for various segments are as follows:

Dedicated Road corridor		Public Road
3.31 km	1.23 km	0.94 km
12-15 mts wide Road	7 mts wide Road	7 mts wide Road

Further, the Project Proponent submitted the following details:-

1. Capacity of truck is 10.5 tons as per directives of Deptt. of Mines & Geology, Goa
2. Total Handling per day is 12658 tons /day
3. Transportation timings are 6.00 am to 7.00 am, 8:00 am to 12.45 pm and 2:00 pm to 5.45 pm. Therefore, the effective transportation time is 9.30 hrs.
4. Per Hour Handling is: 1332 tons/hour
5. No. of Vehicles per Hour (One way): 127 vehicles

ad into concrete road.

6. No. of Vehicles per Hour (to and fro): 254 vehicles
7. The Speed of vehicle is 25 KMPH and the lead distance is 5.48 kms
8. The time taken for 5.48 km is 13.15 mins for each truck and loading time is 1min, weighing time at both source location is 2 min, Tarpaulin tying and untying time is 2 min, unloading time 1 min and waiting time 10 min.
9. Each truck length is 15' . 5" (4.58 m)
10. Distance from truck to truck is 5 m both side = 10 m
11. Each vehicle occupies a min. distance of 14.58 m = ~ 15 m
12. The length of road is 5.48 Km = 5480 m
13. No. of vehicle which can travel on this road for one side= 5480 /15 = 365, However we would be plying only 127 trucks hence effective distance between two vehicles is 43 m.

The Project Proponent submitted the following mitigation measures for transportation:-

1. Public road is hot mixed and same will be maintained.
2. Dedicated road is proposed to be hot mixed in phased manner.
3. Entire Dedicated transportation route is surrounded by thick Green Belt
4. Transportation vehicles shall be properly maintained to minimize the exhaust emission.
5. Regular tests shall be carried out to check exhaust emission and PUC certification of transportation vehicles at prescribed interval.
6. Transportation trucks will be loaded with prescribed capacity and covered with tarpaulin before leaving mines premises.
7. Overloading of the material will be avoided.
8. Regular monitoring of the emission levels.
9. Over speeding of Vehicle will not be allowed.
10. Traffic Marshals shall be provided for regulating movement of vehicles as well as for safety of persons.
11. Training will be given to all drivers about safe driving.
12. Regular water sprinkling by means five hired water tanker of 10KL capacity on haul road and Loading points will be carried out
13. Used of fixed dust suppression system on haul roads
14. Installation of two wheel washed system (one each at the exit of the dedicated road and jetty exit respectively)
15. Manual and mechanised machines for road sweeping
16. Washing of mine exit points/Junctions (Mayem, Pilgao and Jetty exit area) after transportation hours/at night with water tanker having pipe arrangements
17. Underpass proposed at Mayem junction to prevent interface with public.

The Project Proponent submitted that the regular mining in the state of Goa stopped since 2012 (it started for brief period in 2018 and again stopped). The truck owners who have already invested in the 10.5 T trucks are severely affected due to the stoppage of mining activity and are against procurement of new / high-capacity trucks, till their losses are covered. The company has already conducted series of meetings with the truck owner's associations for the higher capacity trucks and the truck owners are not agreeing to any changes in short term of 5 years. However, the engagement with the truck owners for higher capacity truck will continue. Company will also engage with all stake holders to explore the feasibility for installing conveyer or belt system for transportation in near future, if permitted.

The public road which is used for transportation is only 0.94 km long and the same is a hot mix road and in well maintained condition. The dedicated road of 4.54 km has very thick green belt on both the sides. There is no habitation along the dedicated road. Nearest habitation will be more than 250m from the road. The dedicated road before joining the public road is concreted and provided with the wheel wash system. Dedicated road sweeping machine will also be deployed to maintain the public road clean. The company also undertakes to hotmix the stretch of 4.54 km of dedicated road in a phased manner in three years' time frame. The estimated cost towards hot mixing is worked out as INR 18 crores.

5	Since the mine lease area is sharing the Mayem Forest common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.	The Project Proponent submitted the letter from the Office of the Dy. Conservator of Forests, North Goa Division Sensitivity: Public (C4) vide letter no. 5/MINES-GEN/DCFN/TECH/2023-24/56, dated 12.04.2023 stating that the detail of village wise Survey No.s within Block-1 of Bicholim Mineral block was verified and found that the area under the above mentioned Survey Nos is not a Govt. Forest and also does not identified as Private Forest by State Level Expert Committee headed by Sawan/Dr. Karapurkar/V.T. Thomas.
6	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?	The Project Proponent submitted the letter from the Directorate of Mines & Geology vide Lr. No. 03/24/2023/ Major/Mines/Part/489 dated 25.07.2023 stating that 1. M/s. Vedanta has been declared as Preferred Bidder for Bicholim Mineral Block- Block I through an auction process conducted by the Government of Goa as per the Mineral Auction Rules, 2015. 2. M/s. Vedanta Ltd., was not the erstwhile lessee of the said Block prior to auction. 3. The matter of illegal mining in the State of Goa is under investigation by the Special Investigation Team (SIT). The Project Proponent also submitted that the Block-I Bicholim Mineral Block was earlier operated by Sesa Mining Corporation Ltd. (SMCL) formerly known as Dempo Mining Corporation Ltd. Pursuant to Supreme Court Judgment in Goa Foundation order dated 07.02.2018, all the mining leases granted by the State Govt. were cancelled. Thereafter, State Govt. in terms of the said order and as per the provisions of MMDR Act put this block for auction as a fresh lease grant. The e-auction process was conducted in accordance with the Tender Document for said Mineral Block. Vedanta Limited emerged as the highest qualified bidder having submitted the highest final price offer and was declared as the preferred bidder under Rule 9(9) (iii) of auction Rules. Further, upon submission of the first Installment, being 20% of the upfront payment, Government of Goa issued a Letter of Intent (LOI) vide letter no. DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for the grant of a mining lease for Block-I Bicholim Mineral Block in Bicholim, Bordem, Lamgao, Mulgao, Mayem&Sirigao Villages, of Bicholim Taluka, North Goa District, Goa State over an area of 478.5206 Ha over a period of 50 years.
7	The Project Proponent needs to submit the video recording of the public hearing.	The Project Proponent submitted that Goa State Pollution Control Board vide their letter No. 11/15/2023-PCB/ Leg/13555 dated 22/09/2023 submitted all the documents related to public hearing including public hearing video to the Member Secretary, EAC (Non Coal Mining).

iv. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
16.03.2023	F.No: I A-J-110 15/3/20 23-IA-I I(NCM) IA/GA/ MIN/ 422323/ 2023	3-4 May, 2023	Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa	16.06.2023

v. Details of Mine Lease:

a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgoa Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

vi. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

vii. Details of Mining Plan:

Review and Mining Plan approved by Indian Bureau of Mines, Goa	Letter No.	No. MCDR-MPC 1 2023-GOA-IBM_ RO_ GOA
	Date	26.05.2023
	Mine Lease Area	478.5206 Ha
	Mineral	Iron Ore (Major Mineral)
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining without Drilling & Blasting	
Drilling/Blasting	Not Applicable	
Total Reser	84.73 Million Tonnes	

Reserves and Resources	
Proved Mineral Reserve	36.071 Million Tonnes
Life of mine	30 years
Bench Height	7 m
Bench Width	10 m
Individual bench slope	70°
Overall pit slope	<26°
RoM output size	Less than 500 mm
Crushing/Screening	Mobile Dry Crushing and Screening plant shall be available within the proposed mine to handle 4 MTPA of crude ore. The primary crusher will consist of 1 no. of Jaw crusher of capacity 120 TPH with an input feed of -500mm and shall produce output of -70 mm. It shall be followed by secondary crushers, 2 no.s of capacity 300 TPH and 200 TPH respectively. The input feed size shall be -70 mm and output feed size obtained shall be -40mm. The Screening Plants of capacity -600TPH shall be installed where input the feed size shall be -70mm to obtain product of -40mm lumps & -10mm fines.
Transportation details	ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.58 km of which 0.94 km stretch is public road and remaining 4.64 km is company owned dedicated road.
Dumpers capacity	40 tonne (within mines)
Waste handling and Disposal	During the mining period, the waste generated by mining will be temporarily stacked within the mining lease area as surface dump and backfilled in the exhausted portion of the pits. The total waste to be generated during the plan period is about 69.85 million tonnes. An area of 6.7146 Ha shall be utilized for Dumps and Material stocking at the conceptual stage of mining.

viii. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		

Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.

ix. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North
Water Bodies	Asnora River Mayem Lake Mandovi River	Touching lease boundary at one of the points 0.46 km 2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idgah Shri Lairae Temple	Within the lease area 0.86 km
Caves/Fort	300m buffer from Lamgao caves Khorjuvem Fort: 2 km	

x. Presence of Environmentally Sensitive areas in the study area:

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	Yes	Mayem Forest Common Boundary with the mine lease area The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 km Kasarpal RF - 5.1 km Ambadgaon RF - 7.6 km
National park	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/ 968 dated 23.01.2023 stating that at the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. 1. Madei Wild life Sanctuary-14.105 km, E 2. Salim Ali Bird Sanctuary -10.553 km, SW 3. Bondla Wild life Sanctuary -20.476 km, SE

Schedule-I species	Yes	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: 5/FCA/GEN/F&F/DCFN/TECH/2022-23 dated 04.04.2023 with regard to list of Flora and Fauna species present in core and buffer zone. The following Schedule-I species are found in the study area such as 1 Common leopard (<i>Felidae</i>) 2 White-bellied Sea-Eagle(<i>Accipitridae</i>) 3 Indian Peafowl (<i>Phasianidae</i>) 4 Crimson rose- Butterfly (<i>Papilionidae</i>)
Status of Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023. PP has submitted the copy of the acknowledgement from Chief Wildlife Warden.

xi. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

xii. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)		
Period of baseline data collection	March, 2023 to May, 2023	
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season	
Ambient Air Quality (no. of locations) and results	No. of Locations	Results
	9	PM10
		PM2.5
		SO2
		NO2

Noise level (no. of locations) and results

No. of Locations	Parameters	Results
09	During Day Time [Leq dB(A)]	43.1 to 61.7
	During Night Time [Leq dB(A)]	35.9 to 49.3

Water Quality (no. of locations) and results

Surface water quality

No. of Locations	Parameters	Results
07	pH	6.35 - 7.39
	TDS (mg/l)	72 - 11240
	Fluoride (mg/l)	<0.1
	Chloride (mg/l)	18 - 5620
	Fe (mg/l)	<0.05
	Dissolved Oxygen (as O ₂), mg/l	6.2 - 6.9
	Biochemical Oxygen Demand (as O ₂), mg/l	<3.0
	Chemical Oxygen Demand (COD) mg/l	22.0 - 26.0

Groundwater Quality

No. of Locations	Parameters	Results
10	pH	5.63 - 7.07
	TDS (mg/l)	20 - 150

	<table><tr><td></td><td>Fluoride (mg/l)</td><td>0.1</td></tr><tr><td></td><td>Chloride (mg/l)</td><td>5.0 - 19.0</td></tr></table>		Fluoride (mg/l)	0.1		Chloride (mg/l)	5.0 - 19.0								
	Fluoride (mg/l)	0.1													
	Chloride (mg/l)	5.0 - 19.0													
Soil Quality (no. of locations) and results	<table><tr><td>No. of Locations</td><td>Parameters</td><td>Results</td></tr><tr><td rowspan="5">07</td><td>pH</td><td>5.38 to 5.78</td></tr><tr><td>Electrical Conductivity (mohs/cm)</td><td>0.28 to 0.318</td></tr><tr><td>Nitrogen (kg/ha)</td><td>200 to 275</td></tr><tr><td>Phosphorus (kg/ha)</td><td>14.3 to 17.8</td></tr><tr><td>Potassium (kg/ha)</td><td>230 to 263</td></tr></table>	No. of Locations	Parameters	Results	07	pH	5.38 to 5.78	Electrical Conductivity (mohs/cm)	0.28 to 0.318	Nitrogen (kg/ha)	200 to 275	Phosphorus (kg/ha)	14.3 to 17.8	Potassium (kg/ha)	230 to 263
No. of Locations	Parameters	Results													
07	pH	5.38 to 5.78													
	Electrical Conductivity (mohs/cm)	0.28 to 0.318													
	Nitrogen (kg/ha)	200 to 275													
	Phosphorus (kg/ha)	14.3 to 17.8													
	Potassium (kg/ha)	230 to 263													

xiii. Public Hearing (PH) Details:

Advertisement for PH with date	07.07.2023 Regional: Bhangar Bhui, Heraldo, Lokmat & Free press journal (Mumbai Edition) News papers
Date of PH	11/08/2023
Venue	Narayan Zantye Multipurpose Sports Complex, Sarvan, Bicholim, Goa
Chaired by	District Collector, North Goa
Main issues raised during PH	Pollution, impact on ponds, Support for Education, Health, Agriculture Development & Skill Development, Employment.
Budget proposed for addressing issues raised during PH	Rs 309.3 Lakhs

xiv. Rehabilitation & Resettlement:

R & R details	There is presence of habitation within ML Area at Mulgao and lamgao villages. Safety Buffer of 50m will be maintained from the habitations. No Rehabilitation & Resettlement Plan is proposed during life of mine.

xv. Court case details:

Court Case	Yes
Additional information (if any)	First Case: 1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extent it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order the matter has been disposed of by the HC on 17th July 2023 with a direction to the Petitioner to make a representation before the Government and the Government is to dispose of the same within four months. Second Case: 1. WP 592 of 2022 The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to the extent it fails to include the essential facts and in the alternative to stay the auction. 1. Case status is pending 2. No adverse orders have been passed. 3. As per the last order the matter is listed on 01.09.2023.

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will comply to the directions issued by MoE F&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking of Project Proponent	The Project Proponent has submitted an undertaking stating that the Environmental Impact Assessment Report of Block-1 Bicholim Mineral Block of M/s Vedanta Ltd was prepared by M/s Mineral Engineering Services, QCI/NABET Accredited EIA Consultant at Sr.No. 55 as per list of list of accredited consultant/organizations. The Project Proponent has submitted an undertaking that the information and data provided in the EIA report and submitted to the Ministry are factually correct and they are fully accountable for the same.
Consultant submitted an Undertaking vide letter dated 02.06.2023	This is to declare that the prescribed ToRs have been complied with and that the data submitted are factually correct in respect of EIA & EMP report prepared for Block-1 Bicholim Mineral Block of M/s Vedanta Ltd, Goa.

xvii. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost

		(Lakhs/annum)
Plantation	-	7.5
Environment monitoring	44	44
Air pollution control measures	20	300
Water Treatment	-	11
Erosion control /monsoon measures	-	221
Personal protective equipment	-	15
Maintenance of fire protection systems	-	1.5
Environment awareness & training	-	5
Health	8	16
Total	72	621

xviii. Details of project cost and employment:

Particulars	(Rs. In lakhs)
Project Cost	25000 Lakhs
Employment	716 no.s

3.5.3. Deliberations by the committee in previous meetings

Date of EAC 1 :22/09/2023

Deliberations of EAC 1 :

The Project Proponent and the Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent has shown the boundary of the mine lease area and informed the EAC that there are two habitations such as Mulgao and Lumgao and schools are located within the mine lease area. Two schools are located in the Mulgao Village. One school is located at a distance of 138m from the Ultimate Pit Limit (UPL) and the other school is located at a distance of 190m from the Ultimate Pit Limit (UPL). No drilling and blasting is involved. Green barriers are maintained to prevent it from the environment hazards. Tributary of Asnora River is touching the mine lease area on the western side. It has been observed that area between river & bottom pit 5 is approximately 6m AMSL which obstructs the flow of water between them, even the high flood condition and at the place where river is touching the block boundary, it is 10.93m AMSL. Hence, even during high flood level, river will not interact with the pit water. The EAC noted that there are few temples, caves and fort are present in the vicinity of the mine lease area. There will be no surface dumping and will be backfilled concurrently and there are voids available for backfilling. Later on the Project Proponent has informed that the pits will be used as a settling ponds. The EAC noted that the Project Proponent is giving two contradictory statements. The EAC asked the Project Proponent to provide the design of the settling ponds in different pits.

The Project Proponent has informed the EAC that Block-I Bicholim block is an old mine and it was auctioned to Vedanta Ltd in the year 2022 and Letter of Intent (LoI) was granted on 13.01.2023. The EAC asked the Project Proponent that after the year 2018 whether any Environmental Clearance has been granted in the State of Goa. The Project Proponent has informed the EAC after the year 2018 there was no mining in Goa and this instant case is the first case for grant of Environmental Clearance. No forest land is involved in the mine lease area. The EAC noted that the Project Proponent has submitted that Mayem Forest common boundary is sharing with the mine lease area. The EAC was of the view that involvement of forest land within the mine lease area is not clear as there are two contradictory information given by the Project Proponent. The EAC also noted that in this regard, the Project Proponent has not submitted the letter from the Forest Dept. No National Park/Wildlife Sanctuary, ESZ/ESA etc., is located within 10km radius of the study area. An application for Groundwater withdrawal was submitted to Water Resource Department submitted on 19.06.2023. No Rehabilitation and resettlement is involved in this proposal.

The Project Proponent has informed the EAC that ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.48 km of which 0.94 km stretch is public road and remaining 4.54 km is company owned dedicated road. Width of the road is 7.0m. Twenty four hours continuous volume count was manually undertaken during May-2023. The EAC noted that the width of the road is not adequate. About 1205 no. of trips per day will be carried out. No. of working days will be 365. The EAC was of the view that when the rainfall is 3500 mm/year it will be difficult to carry out mining for 365 days. The Project Proponent has informed the EAC that 275 working days are considered for calculation of traffic load. The EAC asked the Project Proponent to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The EAC also asked the Project Proponent to strengthen the road and convert the road into concrete road.

The Project Proponent also informed the EAC that the predominant wind direction was from West to East. Wildlife Conservation Plan has been prepared and submitted to Chief Wildlife Warden (CWLW) on 19.06.2023 for approval with a budget of Rs. 50 Lakhs. At the end of conceptual stage, an area of 105 ha will be under green belt/ plantation. Eco restoration will be carried out in similar to the reclaimed activity carried out in Sanquelim mine. Public hearing was carried out on 11.08.2023 and a budget of Rs 309.3 Lakhs have been earmarked to address the concerns raised during public hearing. The EAC also noted that about 4708 written objections was submitted against the project during the public hearing. The Project Proponent has informed the EAC that the issues are same but the no. of objection letters were more in number and about 5183 no.s of letters were also received in support of the project. The EAC also noted that many complaints were received against the public hearing dated 11.08.2023. The EAC asked the Project Proponent to submit the video recording of the public hearing. There are three court cases at present regarding the auction process and one of the court case was disposed on 17.07.2023 and will abide the directions of the Hon'ble High Court. Other two cases in the matter of MSPL v. State of Goa & Ors. in WP 592 of 2022 and in the matter of Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors. in PIL WP 2029/2023 (F) are pending before the Hon'ble High Court and no adverse orders has been passed.

The Department of Mines and Geology, Goa was invited as a special invitee to discuss the present status of mining in Goa. The Deputy Director has informed that the State Govt. is looking positive to restart the mining operations in Goa. Besides 10% DMF, there is also a scheme called Goa Iron Ore permanent fund wherein 10% of the sale value of the mineral will be spent towards community based activities as per the direction of the Hon'ble Supreme Court. The State Govt. has put up a scheme for approval before the Hon'ble Supreme Court in line with Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) Scheme. This fund has to be kept for prosperity. The report with regard to illegal mining will be obtained from the SIT and will be provided to the Ministry.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the handling of waste of 25.162 MTPA will be more than the Iron Ore production capacity of 3.0 MTPA. The EAC was of the view that the pollution potential will be more in handling of waste. The EAC not convinced with plan for backfilling and with the design of settling ponds as the annual rainfall is projected as 3500 mm/year. The EAC observed that the instant mine is located in dense vegetation area. The EAC also noted that the mine lease area is located close to the proximity of the habitations, school, forest (Mayem common boundary), river, temples, caves and fort. The EAC also observed that the Project Proponent has not properly worked out the traffic load. Many litigations were received against the public hearing/project. Further, the EAC also noted that mines were not in operation in Goa from the year 2018 and this instant proposal is a first case for grant of Environmental Clearance (EC) under auction after 5 years. Thus there is a need to ascertain the present scenario and ground reality with regards to handling of waste, settling ponds, location of waste dump w.r.t habitation, school and river, other surface features as forest (Mayem common boundary), temples, caves and fort, mineral transportation route and traffic congestion. The EAC was of the view that a site visit needs to be conducted by a sub-committee comprising of EAC Members and officers from MoEF&CC. The EAC opined that the Ministry may constitute a sub-committee and submit its report to enable the committee to take a decision on the proposal. Therefore, the EAC **deferred** the proposal for want of following additional information: -

- i. The site visit report of the subcommittee.
- ii. The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.
- iii. The Project Proponent needs to submit the design of settling ponds by considering the annual rainfall, catchment area and its discharge.
- iv. The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road into concrete road.
- v. Since the mine lease area is sharing the Mayem Forest common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.
- vi. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?
- vii. The Project Proponent needs to submit the video recording of the public hearing.

3.5.4. Deliberations by the EAC in current meetings

The Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area. Then, the EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project Proponent/EIA Consultant informed the EAC that plan for backfilling has been revised. About 5 numbers of earlier mined out pits have been identified for backfilling purpose to accommodate waste to be generated in future besides additional pits to be made available progressively with mining till conceptual period. The existing and conceptual availability of voids for backfilling is 157.98 (say 158) million CuM. Conceptual waste generation shall be 124.9 million Cum which will have a swelled volume of 147.43 million CuM. The void area and the capacity available are more than sufficient to meet the backfilling requirement. The Project Proponent also presented the year wise production from the working pits and waste disposal locations. Further, the Project Proponent presented the Progressive Mine Closure Plan showing working pit, backfilling, drainages and settling ponds at the end of plan period.

The Project Proponent informed the EAC that a total of 0.38 million cu.m of void volume is available for holding surface run-off in 12 nos of settling ponds having a cumulative area of 8.84 ha. The EAC asked about the highest rainfall in the past. The Project Proponent informed the EAC that the highest rainfall was 3900mm in the last 10 years. The Project Proponent also informed the EAC that total water holding capacity in pits and settling ponds (7.39 Million Cu.M) is more than rainfall and surface runoff volume from catchment (3.92 Million Cu.M) and hence there is sufficient space for effective surface runoff management in during extreme precipitation times. It is also proposed to strengthen the existing settling ponds embankments by stone pitching, cement pointing, addition of filter beds etc., The total travel distance upto Jetty is 5.48 km comprising of 4.54 km dedicated road and 0.94 km MDR-20 Public Road.

Transportation working days will be 237 days. Trips per day will be 1205 and the capacity of the truck is 10.5 Tonne (T). It is proposed to have a dedicated road in place of 0.94 km stretch of public road within 2.5 years. It is also proposed to replace existing trucks of 10.5 t with higher capacity trucks of 25 t in phased manner to reduce traffic load and emissions per tonne/km. The EAC suggested the Project Proponent to speed up the process of construction of underpass. The Project Proponent presented a letter obtained from the Office of the Deputy Conservator of Forests letter dated 12.04.2023 stating that village wise Survey nos within Block-1 of Bicholim Mineral Block is not a Govt. Forest land and also does not identified as Private Forest land by State Level Expert Committee headed by Sawan/Dr. Karapurkar/V.T. Thomas. The Project Proponent also informed the EAC that Goa State Pollution Control Board vide their letter dated 22/09/2023 submitted all the documents related to public hearing including public hearing video to the Member Secretary, EAC (Non Coal Mining).

Then, the Project Proponent presented the point wise compliance of the recommendations of the subcommittee. The Project Proponent informed the EAC that preliminary techno-economic feasibility study has been undertaken for capacity of 3.0 MTPA from dry mineral processing plant to Sarmanas jetty covering a length of 5.72 km. Width of OLBC corridor is 17 m including service road. The proposed alignment for Over Land Belt Conveyor (OLBC) will be along the current transportation route. At prima facie it does not look feasible to switchover to OLBC system considering the terrain of the likely route having mounds and low-lying areas, vegetation/forest patches and its likely degradation, accessibility, environmental impacts and safety issues, technologies available, cost of the system, implementation period vis-a-vis remaining reserves in the mining lease. Further, the Project Proponent also submitted that they will engage with all stake holders to explore the feasibility for installing conveyor belt system for transportation in near future. At conceptual stage, area of 20 ha will be converted into water reservoir & an area of 293.5 ha will be converted into backfilled area and will be reclaimed & rehabilitated by the plantation. The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc. Pisciculture in mine pits will be developed and also to involve the community for cage fishing to make it a commercially viable venture. It is proposed to develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc. A garden will be developed near the Idgah within the mining block area and proper road will be provided for access of visitors and pilgrims. The Project Proponent also presented the eco restoration model developed in other mines.

The Project Proponent informed the EAC that garland drain capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. A proper height will be maintained on the sides of the garland drain so that water does not get over-flooded from the drains. Permanent water sprinklers with 3.40 km length along the haul road within the mine lease area and 2.80 km length outside the mine lease area on either side of the road will be installed. Crushing & screening units will be modified within 4 months after obtaining the Clearances. It is proposed to develop nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village). Around 1100 sq.m of area will be utilized for the nursery. The Project Proponent informed the EAC that the authenticated list of Schedule I Species as per Indian Wildlife Protection Act 1972 as amended Gazette Notification of Wildlife (Protection) Amendment Act, 2022 has been obtained from the Dy. Conservator of Forests Wildlife & Eco-Tourism (North), Panji-Goa vide letter dated 27.11.2023 and according to this authenticated list, 29 Schedule I Species have been recorded within 10 km study area. The conservation activities proposed under Wildlife Conservation Plan has been revised with a budget of Rs 60.0 Lakhs and same will be finalized after discussion with the Forest Dept. A silt load study was carried out through Center for Advance studies, Department of Geology, University of Delhi and it was concluded that, all the structures made for the settling of sediments are found to be more than sufficient to accommodate sediments even during peak rainfall.

The Project Proponent informed the EAC that a letter was obtained from the Directorate of Mines & Geology vide letter dated 25.07.2023 stating that matter of illegal mining in the State of Goa is under investigation by the Special Investigation Team (SIT). The EAC asked the Project Proponent to submit the undertaking regarding illegal mining. The Project Proponent submitted an undertaking vide email dated 26.12.2023 stating that M/s Vedanta limited is the preferred bidder for the Bicholim Mineral Block- Block 1 declared by the Govt. of Goa and it is also to undertake that there is no illegal mining done by M/s Vedanta Ltd. The EAC opined that the instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022 (MSPL v. State of Goa & Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors) regarding challenging the state's decision to go ahead with the auction of the mining block.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC in its meeting held during 26-28 December, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance (EC) to Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goasubject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Environment Conditions

3.5.6.1. Specific

Air Pollution	
1.	As committed by the Project Proponent, existing trucks of 10.5 Tonnes shall be replaced with higher capacity trucks of 25 Tonnes in phased manner to reduce traffic load and emissions per tonne/km.
2.	Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC. Regular sprinkling shall be done on roads to suppress the dust at the source.
3.	The Project Proponent needs to install the permanent water sprinklers along 3.40 km haul road within the ML area and 2.80 km length outside the ML area on either side of the road.
4.	The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
Awareness on Single Use Plastic (SUP)	
1.	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
Capping	
1.	The Hon'ble Supreme Court has imposed a capping on mining of iron ore to 20 MTPA for the entire State of Goa. Accordingly, the Project Proponent shall first obtain the necessary permission from the competent authority with regard to the amount of mineral they can mine per year, before starting its mining operation.
Cleaner production	
1.	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
Common boundary	
1.	The Project Proponent needs to obtain prior permission from the MoEF&CC for mining in common boundary as and when required.
Conservation of Wildlife	
1.	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
2.	The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so

	as to minimize the ecological impacts.
3.	The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
Continuous Ambient Air Quality Monitoring System (CAAQMS)	
1.	The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
Conveyor Belt	
1.	As committed before the EAC, the Project Proponent needs to explore the feasibility for installing conveyor belt system for transportation.
Court Case	
1.	The instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022 (MSPL v. State of Goa & Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors) regarding challenging the state's decision to go ahead with the auction of the mining block.
Crushing/Screening	
1.	The Project Proponent needs to modify the crushing & screening units within 4 months from the date of issue of this EC.
Ecology Restoration	
1.	The ecology restoration or mine reclamation activities shall be carried out concurrently with mining operations. The Project Proponent shall ensure that the restoration models demonstrated before the EAC shall be developed in association with research institutes like NEERI, Goa University etc.
2.	The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc., Pisciculture in mine pits will be developed and also the local community will be involved for cage fishing to make it a commercially viable venture.
Environment Monitoring & Reporting	
1.	The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
Green belt and Plantation	
1.	The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.

2.	Extensive native fruit bearing plantation shall be carried out in all safety zones with density of 2500 trees/ha.
Implementation of EMP	
1.	The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 72 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
2.	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
Nursery	
1.	The Project Proponent needs to develop a nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village) for an area of about 1100 sq.m in consultation with State Forest Department. PP shall develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc.,
Occupational health checkup	
1.	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
Permission for Groundwater withdrawal	
1.	NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
Public Hearing concerns	
1.	The budget of Rs 309.3 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
Regrassing	
1.	
Settling pond	
1.	The Project Proponent needs to strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge.
2.	The catch drains and siltation ponds needs to be regularly maintained to arrest silt and sediments flow from dumps.
Soil erosion	

1.	The waste dump slopes shall be covered with laterite material and then with biodegradable geotextile mats to prevent the soil erosion of the dump slopes so as to facilitate the growth of native species.
Surface water monitoring	
1.	Regular monitoring and analysis of discharge water and at upstream and downstream of Bicholim and Asnora river needs to be carried out quarterly through NABL/MoEF&CC accredited laboratory.
Training program	
1.	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.
Underpass	
1.	The Project Proponent needs to speed up the process of construction of underpass.
Wheel Washing	
1.	The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine.

3.5.6.2. Standard

1(a)	Mining of minerals
Air quality monitoring and preservation	
1.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
1.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
Corporate Environment Responsibility (CER)	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

Green Belt	
1.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
Land reclamation	
1.	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
1.	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
1.	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
1.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
Mining plan	
1.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
1.	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
Miscellaneous	
1.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
1.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and

	also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
1.	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
1.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
1.	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
1.	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
1.	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
1.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
1.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
1.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
Noise and vibration monitoring and prevention	
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
1.	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
Public hearing and human health issues	
1.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided

	in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
Statutory compliance	
1.	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
1.	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
1.	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
1.	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
1.	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
1.	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
Transportation	
1.	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
1.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled

	and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
Water quality monitoring and preservation	
1.	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
1.	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
1.	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
1.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
1.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
1.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
1.	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
null	
1.	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The

	CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
1.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

Day 2 -27/12/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Proposed 3C2 Limestone Block (Auctioned Block) (Area 386.0215 Ha.) with Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with Installation of Crusher 1600 TPH with Wobbler located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan. by M/s. JSW Cement Ltd. by MANOJ RUSTAGI located at NAGAU,RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/451760/2023	IA-J-11015/49/2023-IA-II(NCM)	27/11/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for mining of Limestone in 3C2 Limestone Block (Auctioned Block) of M/s. JSW Cement Ltd with proposed Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with Installation of Crusher 1600 TPH with Wobbler in the mine lease area of 386.0215 Ha, located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- The mine lease area is located between Latitude: 27°16'25.15"N to 27°17'21.393"N and Longitude: 73°52'31.652"E to 73°53'54.28"E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S. no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease issued vide letter no. P.2(21) Khan/Group-2/2022 through e-auction process	15.11.2022	Limestone	3 years	Govt. of Rajasthan	386.0215

iv. Land Use/Land Cover of the Mine Lease area:-

Private land	292.3618 ha

Government waste land	90.2725 ha
Forest Land	-
Total Mining lease area (MLA), Ha	386.0215 ha <i>Note: The variation in the total block area (386.0215 Hectare) and calculated by superimposition of block on revenue record (382.6343 hectare) is due to measurement in partial khasras and differences of areas in digitized settlement sheets and revenue record.</i>
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the ML area.

v. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/6/2023-AJM-IBM_R O_AJM
	Date	11.05.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	386.0215 ha
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be used to control ground vibrations, noise & fly rocks.	
Geological Reserves	156.76 Million Tonnes	
Mineable Reserves	129.64 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 5.68 Million TPA 1. Limestone: 2.50 Million TPA 2. OB/IB/Waste: 2.80 Million TPA 3. Top Soil: 0.38 Million TPA	
Life of mine	~55 years	

Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)
No. of Mine Benches	6 benches at conceptual stage
Existing Depth, m bgl	It is a proposed mining project so this is not applicable.
Ultimate Depth of Mining, m bgl	257.5 m AMSL (50 m bgl (maximum depth)
Ground Water Table, m bgl	192.5 m to 182.5 m AMSL (115 m to 125 m bgl)
Details of ground water inter section	Water table will not be intersected by mine workings at any stage of mining operation.
Individual bench slope	75°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler
Mineral Beneficiation	Nil
RoM output size	<110 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW Cement Ltd. via Over Land Belt Conveyor (OLBC) and via road for sale to the prospective buyers.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	Top Soil: - During the first plan period, 0.21 Million Cu.m of Topsoil will be generated which will be used for Greenbelt development/Plantation. - At conceptual stage, 10.01 Million Cu.m of Top Soil will be generated and it will be used for greenbelt development/ plantation and for carpeting of the backfilled area for plantation. OB/IB/Waste: - During the plan period, no overburden/Inter-burden/waste will be generated. - At conceptual stage, about 43.44 Million Cu. m of waste will be generated which will entirely be utilized for back filling of mined-out area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	200 KLD	Domestic	7.0 KLD
		Dust suppression	168.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for withdrawal/ intersection along with details of grant and its validity	Working depth during the plan period will be 299.5 m AMSL (8.0 m bgl) and at conceptual stage, ultimate working depth will be 257.5 m AMSL (50 m bgl). Depth of water table in the area is at 192.5 m to 182.5 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Nearest Village	Harima	~2.0 km in SW direction
Nearest School	Govt. Primary School, Banjaron Ki Dhani, Deh is present within the lease area in N W corner	
Nearest Town	Deh	~1.0 km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from North boundary to West direction.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~17.3 km in SW direction
Water Bodies	ChaparNaadi	(~ 4.2 km in SE direction)
	JanjolaiNaadi	(~4.8 km in North direction)
	JakhaliNaadi	(~5.0 km in NW direction)
	Bamanda Nada	(~7.5 km in SE direction)
	PinsariyaNaadi	(~ 8.0 km in SE direction)
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/N	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks

	o	
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule -I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt and plantation will be carried out over an area of 196.52 ha (5.93 ha area on 7.5 m lease periphery, on waste dump covering an area of 10.52 ha, 155.44 ha on backfilled area & 24.63 ha on safety zone of school, electric line & Road).
Budget for green plant & plantation till the end of life of mine.	Rs. 5.9 Cr. (196.52 ha, 2,94,255 Saplings)
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1611 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1611 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	5.93 ha
50 m safety zone of nallah, roads, electric lines	24.63 ha

500 m safety zones of nearest habitation villages

Nil

x. Rehabilitation & Resettlement (R&R):

R & R details

The Project Proponent submitted that the total mine lease area is 386.0215 ha, out of which 292.3618 ha is private land and 90.2725 ha is Govt. Land which spreads in 2 villages: Harima & Deh. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status

Undertaking by Project Proponent w.r.t court case

The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018

The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401394 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 203.50 Crores
Employment	79 persons

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent presented the KML of mine leases of 3C2 Limestone Block, 3C1 Limestone Block and 3D1 Limestone Block. The EAC noted that all three mine leases sharing common boundary and contiguous to each other. The Project Proponent informed the EAC that all these three blocks are non-captive mine. The Limestone produced will be used for cement manufacturing in company's proposed Cement Plant and the Limestone will also be sold to prospective buyers. The Project Proponent informed the EAC that in 3C2 Limestone Block, a Govt. Primary School, Banjaron Ki Dhani, Deh is located within the lease area in NW corner. NH-58 is passing through all these three mine lease areas. A crusher of 1600 TPH & Wobbler will be installed in all these three mine lease areas respectively. Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed Limestone will be transported to the proposed Cement Plant of M/s. JSW Cement Ltd. via Over Land Belt Conveyor (OLBC) and via road for sale to the prospective buyers. The EAC opined that the Project Proponent needs to submit the year wise sequence of mining operation considering the nearby surface features and their impacts and mitigation measures. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.

Further, the Project Proponent informed the EAC that there are no Wildlife Sanctuaries, National Parks, Biosphere

Reserves), Reserve/ Protected Forest within 10km radius study area. The EAC opined that the Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The EAC asked the Project Proponent to verify the list as per the latest Wildlife Protection Amendment Act, 2022. The EAC also asked the Project Proponent to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not. The EAC noted that the tree cutting is involved in all these three mine leases. The EAC asked the Project Proponent to submit the compensatory afforestation plan and also to submit the action plan for tree transplantation. The EAC noted that Rehabilitation & Resettlement (R&R) is involved in all these three mine leases. The EAC asked the Project Proponent to submit the detailed R&R plan in consultation with the local people and also needs to cover all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent informed that compensation provided to PAF is mostly 3-4 times of the land cost. The EAC opined that the Project Proponent needs to submit the livelihood education and skill development plan.

Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3C2 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 386.0215 Ha, located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

3.1.5. Recommendation of EAC

Recommended

3.1.6. Details of Terms of Reference

3.1.6.1. Specific

Action plan for plantation/greenbelt

1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.

Action plan for shifting school

1.	The Project Proponent needs to submit the action plan for shifting the school within the mine lease area.

Aravalli

1.	The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.

Common boundary working

1.	The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.

Drone survey

1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

Environment Monitoring & EMP

1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
2.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Groundwater	
1.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
2.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
3.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
HT line	
1.	The Project Proponent needs to initiate action to obtain permission to shift the HT line.
Illegal mining	
1.	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. JSW Cement Ltd or not?
Plan for restoration of ecology	
1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
Plan for R&R	
1.	The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
2.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc.
Plan for sequence of mining and backfilling	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
Scientific study on flora and fauna	
1.	The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the

	endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
Tree transplantation	
1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
Water bodies	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

3.1.6.2. Standard

1(a)	Mining of minerals
Baseline Environment	
1.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
1.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Critically Polluted Areas, Aravali & CRZ	
1.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating

	LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
Environmental Monitoring and Management	
1.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
1.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
1.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
1.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
Hydro Geology	
1.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
1.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
Land Acquisition and R&R	

1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.

Land Environment

1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
1.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
1.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
1.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

Miscellaneous

1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated, c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Project Details

1.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant

	of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
1.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
1.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
1.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
1.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
1.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
1.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

1.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

Risk Assessment & Disaster Management

1.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
1.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Socio-Economic Environment

1.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
1.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
1.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

Transportation

1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Water Environment

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
1.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary

	safeguard measures, if any required, should be provided.
Wildlife	
1.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
1.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Proposed 3D1 Limestone Block (Auctioned Block) (Area: 357.0937 ha) with Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler located at Villages: Harima, Sarasani & Deh, Tehsil: Nagaur & Deh, District: Nagaur, State: Rajasthan by M/s. JSW Cement Limited by MANOJ RUSTAGI located at NAGOUR, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/452877/2023	IA-J-11015/46/2023-IA-II(NCM)	04/12/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

The instant proposal is for mining of Limestone in 3D1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with proposed Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 357.0937 ha, located at Villages: Harima, Sarasani&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan.						
2. The details of the project as ascertained from the document submitted by the Project Proponent are given below:						
i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.						
ii. The mine lease area is located between Latitude: 27°15'55.751"N to 27°16' 25.809"N and Longitude: 73°51'30.391"E to 73°53'54.280" E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.						
iii. Details of Mine Lease:						
S. no	Prospecting License/ Letter of Intent (Lo I)/ Grant of Mine lease and Lr No	Date of the g	Name of the Mineral & (M	Period of Gra	Grante d by	Mine lea se area i

		rant	ajor/ Minor)	nt		n Ha
1.	Letter of Intent (LoI) for grant of mining lease vide Lr No. P.3(10) Khan/Group-2/2017 issued through e-auction process	30.06.2023	Limestone	3 years	Govt. of Rajasthan	357.0937

iv. Land Use/Land Cover of the Mine Lease Area:-

Private land	301.8498 ha
Government waste land	55.2439 ha
Forest Land	-
Total Mining lease area (MLA), Ha	357.0937 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the mine lease area.

v. Details of Mining Plan:-

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	E-8702-MCDR-MPC0LST/21/2023-AJM-IBM_RO_AJM
	Date	06.12.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	357.0937
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be used to control ground vibrations, noise & fly rocks.	
Geological Reserves	199.15 Million Tonnes	
Mineable Reserves	158.03 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 1.40 Million TPA 1. Limestone: 1.0 Million TPA	

	2. Waste: 0.34 Million TPA 3. Top Soil: 0.06 Million TPA
Life of mine	~161 years
Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)
No. of Mine Benches	4 benches at conceptual stage
Existing Depth, m bgl	It is a proposed mining project and hence not applicable.
Ultimate Depth of Mining, m bgl	274.5 m AMSL (30 m bgl (maximum depth)
Ground Water Table, m bgl	124 m AMSL to 184 m AMSL (115 m to 125 m bgl)
Details of ground water inters ection	Water table will not be intersected by mine workings at any stage of mining ope ration.
Individual bench slope	75°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler
Mineral Beneficiation	Nil
RoM output size	<110 mm
Transportation details includi ng capacity of dumper/tipper, mode of transport and distanc e	Limestone will be transported from mine face to crusher by 40 T dumpers via ha ul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW C ement Ltd. via Overland belt conveyor and via road for sale to the prospective b uyers.
Generation of Topsoil/OB & i ts Management during plan p eriod & conceptual period.	Top Soil: • During the first plan period, 21255Cu.m of Topsoil will be generated whi ch will be used for Greenbelt development/Plantation. • At conceptual stage, total 1015336.76 Cu.m of Top Soil will be generate d which willbe entirely be used for greenbelt development/ plantation. • Waste: • During the plan period, no overburden in the form of Soil/ alluvium will be generated. • At conceptual stage, about 27.51 Million Cu.m of waste generated will b eutilized for back filling of mined-out area.
Generation of Mineral Reject	-

s/ Waste & its Management during plan period & conceptual period

vi. Water requirement:

Total water requirement	200 KLD	Drinking & Domestic	5.0 KLD
		Dust suppression	170.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for withdrawal/ intersection along with details of grant and its validity	Working depth during the plan period will be 301 m AMSL (8.0 m bgl) and at conceptual stage, ultimate working depth will be 279 m AMSL (30 m bgl). Depth of water table in the area is at 124 m AMSL to 184 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Nearest Village	Harima	~150 m in SW direction
Nearest School	Govt. Upper Primary School, Harima	~300 m in SW direction
Nearest Town	Deh	~3.0 km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from North-west corner.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~15.1 km in SW direction
Water Bodies	ChhapparNaadi	(~ 3.8 km in SE)
	JakhaliNaadi	(~ 5.4 km in NW)
	BamandaNaadi	(~ 6.6 km in SE)
	JanjolaiNaadi	(~ 7.0 km in North)
	PinsariyaNaadi	(~ 7.6 km in SE)

Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule - I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be ha 140.22 ha on backfilled area and 10.79 ha area including Greenbelt along 7.5 m Mine Periphery & Plantation in Safety Zone etc.).
Budget for green plant & plantation till the end of life of mine.	Rs. 4.5 Cr.
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1570 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1570 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineraliz	43.1137 ha area including greenbelt Road, HT Line, Power line safety zone pla

ed zone	ntation etc.
50 m safety zone of nallah, roads, electric lines	

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the total mine lease area is 357.0937 ha, out of which 55.2439 ha is Govt. Land and 301.8498 ha is a Pvt land which spreads in 3 villages: Harima, Sarasani&Deh.Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications..

xi. Court case details:

Court Case, No and its present status	The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401393 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 197.60 Crores
Employment	82 persons

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The EAC deliberated the instant proposal (3D1 Limestone Block) along with 3C2 Limestone Block and 3C1 Limestone Block as all these mine leases sharing common boundary and contiguous to each other. Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3D1 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 357.0937 ha, located at Villages: Harima, Sarasani & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

Action plan for plantation/greenbelt	
1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Aravalli	
1.	The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.
Common boundary working	
1.	The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.
Drone survey	
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
Environment Monitoring & EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
2.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
Groundwater	
1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
3.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Illegal mining	
1.	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether

	the same has been carried out by M/s. JSW Cement Ltd or not?
Plan for restoration of ecology	
1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
Plan for R&R	
1.	The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
2.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc.
Plan for sequence of mining and backfilling	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
Scientific study on flora and fauna	
1.	The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
Tree transplantation	
1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
Water bodies	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

3.2.6.2. Standard

1(a)	Mining of minerals
Baseline Environment	
1.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear

	the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
1.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Critically Polluted Areas, Aravali & CRZ	
1.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
Environmental Monitoring and Management	
1.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
1.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

1.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
1.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
Hydro Geology	
1.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
1.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
Land Acquisition and R&R	
1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
1.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
1.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
1.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
Miscellaneous	
1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which

	the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
Project Details	
1.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
1.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
1.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
1.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
1.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
1.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
1.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with

	the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.
Risk Assessment & Disaster Management	
1.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
1.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.
Socio-Economic Environment	
1.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
1.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary

	allocations.
1.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
Transportation	
1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
Water Environment	
1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
1.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
Wildlife	
1.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
1.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Proposed 3C1 Limestone Block (Auctioned Block) (Area: 300.7284 Ha.) with Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler located at Villages: Harima, Bhadana & Deh, Tehsil: Nagaur & Deh, District: Nagaur, State: Rajasthan by M/s. JSW Cement Limited by MANOJ RUSTAGI located at NAGAU, RAJASTHAN	
Proposal For	Fresh ToR

Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/452414/2023	IA-J-11015/50/2023-IA-II(NCM)	27/11/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

The instant proposal is for mining of Limestone in 3C1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with proposed Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler in the mine lease area of 300.7284 ha, located at Villages: Harima, Bhadana&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent are given below:

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- The mine lease area is located between Latitude: 27°16'24.639"N to 27°17'20.742"N and Longitude: 73°51'27.709" E to 73°52'32.21 " E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S. no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent(LoI) for grant of mining lease issued vide letter no. P.2(22) Khan/Group-2/2022through e-auction process	15.11.2022	Limestone	3 years	Govt. of Rajasthan	300.7284

iv. Land Use/Land Cover of the Mine Lease area:

Private land	264.0431 ha
Government waste land	36.6953 ha
Forest Land	-
Total Mining lease area (MLA), Ha	300.7284 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the ML area.

v. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/5/2023-AJM-IBM_R O_AJM
	Date	12.05.2023
	Mineral & (Major/Minor)	Limestone (Major)

	Mine Lease Area, Ha	300.7284 ha
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be used to control ground vibrations, noise & fly rocks.	
Geological Reserves	188.45 Million Tonnes	
Mineable Reserves	168.46 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 2.04 Million TPA 1. Limestone: 1.45 Million TPA 2. OB/IB/Waste: 0.52 Million TPA 3. Top Soil: 0.07 Million TPA	
Life of mine	~119 years	
Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)	
No. of Mine Benches	5 benches at conceptual stage	
Existing Depth, m bgl	It is a proposed mining project and hence not applicable.	
Ultimate Depth of Mining, m bgl	274.5 m AMSL (39 m bgl (maximum depth))	
Ground Water Table, m bgl	198.5 m to 188.5 m AMSL (115 m to 125 m bgl)	
Details of ground water inter section	Water table will not be intersected by mine workings at any stage of mining operation.	
Individual bench slope	75°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler	
Mineral Beneficiation	Nil	

RoM output size	<110 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW Cement Ltd. via Overland belt conveyor and via road for sale to the prospective buyers.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	Top Soil: - During the first plan period, 0.14 Million Cu.m of Topsoil will be generated which will be used for Greenbelt development/Plantation. - At conceptual stage, 4.31 Million Cu.m of Top Soil will be generated which will be entirely be used for greenbelt development/ plantation and for carpeting of the backfilled area for plantation. OB/IB/Waste: - During the plan period, no overburden/Inter-burden/waste will be generated. - At conceptual stage, about 19.86 Million Cu.m of waste will be utilized for back filling of mined-out area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	200 KLD	Domestic	7.0 KLD
		Dust suppression	168.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for with drawal/ intersection along with details of grant and its validity	Working depth during the plan period will be 295 m AMSL (18.5 m bgl) and at conceptual stage, ultimate working depth will be 274.5 m AMSL (39 m bgl). Depth of water table in the area is 198.5 m to 188.5 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Nearest Village	Harima	~1.0 km in SW direction
Nearest Town	Deh	~3.0 km in NE direction

Nearest School	Govt. Primary School, Banjaron Ki Dhani, Deh	~0.06 Km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from East boundary to the South direction.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~15.7 km in SW direction
Water Bodies	JakhaliNaadi	~4.0 km in NW Direction
	JanjolaiNaadi	~5.4 km in North Direction
	ChaparNaadi	~ 5.9 km in SE Direction
	Bamanda Nada	~9.0 km in SE Direction
	PinsariyaNaadi	~ 9.3 km in SE Direction
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule - I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt and plantation will be carried out over an area of 116.61 ha (5.18 ha area on 7.5 m lease periphery, 95 ha backfilled area, 4.13 ha area will be covered under top bench plantation & 12.3 ha under safety zone of road, school & other virgin area).
Budget for green plant & plantation till the end of life of mine.	Rs. 3.50 Cr. (116.61 ha, 174,915 Saplings)
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1378 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1378 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	5.18 ha
50 m safety zone of nallah, roads, electric lines	12.3 ha
500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that the total mine lease area is 300.7284 ha, out of which 264.0431 ha is a private land and 36.6953 ha is a Govt. Land which spreads in 3 villages: Harima, Bhadana & Deh. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.201	The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401395 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & O

8	rs before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 198.45 Crores
Employment	91 persons

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The EAC deliberated the instant proposal (3C1 Limestone Block) along with 3C2 Limestone Block and 3D1 Limestone Block as all these mine leases sharing common boundary and contiguous to each other. Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3C1 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler in the mine lease area of 300.7284 ha, located at Villages: Harima, Bhadana & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

3.3.5. Recommendation of EAC

Recommended

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

Action plan for plantation/greenbelt

1. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.

Aravalli

1. The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.

Common boundary working

1. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.

Drone Survey

1.	
Environment Monitoring & EMP	
1.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
2.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
Groundwater	
1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
3.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Illegal mining	
1.	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. JSW Cement Ltd or not?
Plan for restoration of ecology	
1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
Plan for R&R	
1.	The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
2.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc.
Plan for sequence of mining and backfilling	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
Scientific study on flora and fauna	

1.	The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
Socio Economic	
1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
Tree transplantation	
1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
Water bodies	
1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

3.3.6.2. Standard

1(a)	Mining of minerals
Baseline Environment	
1.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
1.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
Critically Polluted Areas, Aravali & CRZ	

1.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
Environmental Monitoring and Management	
1.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
1.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
1.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
1.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
Hydro Geology	
1.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
1.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
Land Acquisition and R&R	

1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.

Land Environment

1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
1.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
1.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
1.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

Miscellaneous

1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated, c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Project Details

1.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant

	of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
1.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
1.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
1.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
1.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
1.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
1.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

1.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

Risk Assessment & Disaster Management

1.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
1.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Socio-Economic Environment

1.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
1.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
1.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

Transportation

1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Water Environment

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
1.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary

	safeguard measures, if any required, should be provided.
Wildlife	
1.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
1.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Proposed Dongargaon Limestone Mine of RCCPL Private Limited having production capacity 1.52 Million TPA (ROM- Limestone – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA) over an area of 252.36 ha. located in Village (s) – Dongargaon, Dahigaon and Wegaon, Tehsil – Wani & Maregaon, District – Yavatmal, Maharashtra. by PRAHLAD CHOUDHARY located at YAVATMAL, MAHARASHTRA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MH/MIN/451465/2023	J-11015/33/2022-IA-II(NCM)	04/12/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

The instant proposal is for mining of Dongargaon Limestone Mine of M/s RCCPL Private Limited with total excavation of 1.52 Million TPA (Limestone: 0.9 Million TPA (ROM), OB – 0.56 Million TPA & Soil – 0.06 Million TPA) over an area of 252.36 ha, located at Village (s) – Dongargaon, Dahigaon and Wegaon, Tehsil – Wani & Maregaon, District Yavatmal, Maharashtra. 2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: - i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and appraised at the Central level. ii. The mine lease area is located between Latitude: 20°2’24.76”N to 20°3’43.16”N and Longitude: 78°50’22.24”E to 78°51’44.12”E. The mine lease area falls under the Survey of India Toposheet No: 55L/16 and falls in Seismic Zone – II. iii. Details of Terms of Reference: a) The Project Proponent obtained Terms of Reference vide ToRLr. No: IA-J-11015/33/2022-IA-II(NCM) dated 03.10.2022 for mining of Limestone in Dongargaon Limestone Mine of M/s RCCPL Private Limited with Total Excavation of 1.52 Million TPA [Limestone (ROM) – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million

TPA] in the mine lease area of 252.36 Ha for undertaking detailed EIA/EMP study.

iv. Details of Mine Lease:

S. No	Lease Particulars	Date of Grant	Mineral	Mine Lease Area, Ha	Period	Granted by
1	Letter of Intent for grant of mining lease in pursuant to Rule 10 (2) of the Mineral (Auction) Rules, 2015 and this Letter of Intent is valid for a period of 3 years from the date of its issuance	20.05.2022	Limestone	252.36	50 years	Govt. of Maharashtra

v. Land Use/Land Cover of the Mine lease area:

Private Agriculture land	252.36 Ha
Government land	Nil
Total Mine lease area (MLA)	252.36 Ha

vi. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	YTL/LST/MPLN-02/2022-NGP
	Date	12.08.2022
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	252.36
Mining Parameters	Quantitative Description	
Method of Mining	Open cast Mechanized	
Drilling/Blasting	115 mm dia and 5 m (+10% subgrade drilling) will be drilled with compressed-air-operated DTH drills. The blasting will be done by ANFO/SME/Slurry as column charge and slurry / cast booster explosive as booster charge. Controlled blasting will be practiced by using Nonel detonators.	
Geological Reserves	12.95 Million Tonnes	
Mineable Reserves	5.36 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Respects/ Waste, MTPA)	Total Excavation-1.52 Million TPA Mineral (Limestone)-0.9 Million TPA OB-0.56 Million TPA Soil-0.06 Million TPA	
Life of mine	8 Years	
Mine Bench Height & Bench Width	Bench Height- 5.0 m & Width-15.0 m	

No. of Mine Benches	Max. 12		
Existing Depth, m bgl	Nil		
Ultimate Depth of Mining, m bgl	49 m bgl		
Ground Water Table, m bgl	Post Monsoon-25 m bgl& Pre-Monsoon-29 m bgl		
Details of ground water intersection	Ground water table will be intersected during Post Monsoon period of 4th year.		
Individual bench slope	800		
Overall pit slope	350		
Details of existing/ proposed C rusher	Not Any		
Mineral Beneficiation	Not Any		
RoM output size	400 mm		
Transportation details including capacity of dumper/tipper, mode of transport and distance	Production TPD	Average - 3000 Tonne (Limestone)	
	Dumper Capacity	25/30 Tonne	
	Mode of Transport	By Road	
	Distance	55 km	
	No. of Dumper Required per Day	34 No. of dumper	
Generation of Topsoil/OB & its Management during plan period & conceptual period	Particular	Plan Period	Conceptual
	Soil	0.16 Million Tonne	0.19 Million Tonne
	Management	Will be Stored at Soil dump and use for plantation	
	Overburden	1.89 Million Tonne	2.26 Million Tonne

	<table><tr><td>den</td><td></td><td></td></tr><tr><td>Management</td><td>Will be Stored at waste dump</td><td>Shall be utilized for backfilling</td></tr></table>	den			Management	Will be Stored at waste dump	Shall be utilized for backfilling
den							
Management	Will be Stored at waste dump	Shall be utilized for backfilling					
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Not Any 						

vii. Water requirement:

Total water requirement	115.0 KLD		Domestic	4.0 KLD
	Fresh	105.6 KLD	Dust Suppression	80.0 KLD
	Treated	9.4 KLD	Plantation	23.0 KLD
			Workshop	8.0 KLD
Source	Ground Water & Mine Pit Water			
Permission	No Objection Certificate (NOC) for Groundwater abstraction was obtained vide letter no. CGWA/NOC/MIN/ORIG/2023/18998, dated 11.08.2023 for abstraction of fresh water of 115 m3/day for the period up to 10.08.2025.			

viii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance &Directions		
Nearest Village	Dongargaon	0.40 km, N (From lease boundary) 0.59 km, N (From mine working pit)		
Nearest Town	Wani	8.60 km, E		
Nearest Highway	NH-930	4.0 km, N		
Nearest Railway station	Wani	10.4 km, ENE		
Water bodies				
	S. No	Particulars	Distance (Km)	Direction
	1.	NirgudaNala adjoining lease boundary	0.86 (from Nearest working pit in N)	N

2.	NirgudaNala passing through lease boundary	0.170 (from Nearest working pit in S)	S
3.	GhanmodNala	3.53	NE

Forest

S. No.	Particulars	Distance (Km)	Direction
		(From Lease Boundary)	
Reserve Forest (RF)			
1.	Borgaon	3.49	SE
1.	Ghonsa	4.83	SSW
1.	MaregaonRamna	4.86	N
1.	Maregaon	5.41	N
1.	Margaon	6.37	N
1.	Suknegaon	6.66	SSE
1.	Manki	7.04	SE
1.	Pendhari	8.61	WSW
1.	Petur	8.67	SE

	1.	Bhivkund	8.77	SW
	1.	Phiski	9.90	N
	Protected Forest (PF)			
	1.	PF N/V Dongargaon	0.72	NE
	1.	PF N/V Borda	2.94	S
	1.	PF N/V Kegaon	3.33	WSW
	1.	PF N/V Gothani	5.06	SW
	1.	PF N/V Surla	8.85	SW
	1.	Lakhapur PF	9.71	NNE

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	The Project Proponent submitted the letter from the Office of the Conservator of Forest (Territorial), Yavatmal, Forest Circle dated 23.12.2022 stating that no forest land involved in the mining lease area of 252.36 ha.
National Park	No	The Project Proponent submitted the letter from the Office of the Principal Chief Conservator of Forest (HoFF) vide letter dated 19.06.2023 stating that there is no Sanctuary,

Wildlife Sanctuary	No	National Park or Tiger Corridor observed within 10 km area from the mining area. The Tipeshwar Sanctuary is 38 Km away from this mining area. Hence, there is no need to take wildlife clearance for this proposal. The Project Proponent also submitted the map certified by Principal Chief Conservator of Forest (Wildlife).
Elephant/Tiger Reserve		
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	
Schedule-I species (No.s and name of schedule-I species with a authenticated letter)	Yes	The Project Proponent submitted the authenticated list of flora and fauna vide LrNo. D ESK - 23 (2) / WL / SURVEY / PRAKRA30 / 785 / 2023-24, dated 19.06.2023. Core Zone - Large Bengal Monitor Lizard Buffer Zone - Tiger, Sloth Bear, Indian Pangolin, Indian Peafowl.
Wildlife Conservation Plan	Yes	The Project Proponent submitted that the Wildlife Conservation plan for Five Schedule-I species was prepared and submitted to DCF, Pandhakarwada, as well as PCCF (WL) Maharashtra on the basis of present study Field Observations, Working Plan and as per the recommendation of the Forest department – Yavatmal (Maharashtra). WLCP has been forwarded by CCF Amravati, on 08.11.2023 to APCCF (WL) East, Nagpur, Maharashtra.

x. Green belt/plantation details:

Proposed area for green belt/plantation	38.94 ha
Budget for green plant& plantation till the end of life of mine.	Rs. 1.01 Cr.
Budget for nursery	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
Along Road, Near Soil & OB Stack	14.16 ha
Dumps Area	6.84 ha
Backfilled area	12.80 ha
Two uppermost benches	5.14 ha
Total no. of saplings proposed to plant	39,210 No.s

xi. Baseline data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	October, November & December - 2022
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post Monsoon Season

Predominant Wind direction (From)		North																
Ambient Air Quality (no. of locations) and results		8 No. of Locations of Ambient Air Quality Monitoring																
<table border="1"> <thead> <tr> <th>Particular</th> <th>Results</th> <th>Standard</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>38.5 to 56.7 mg/m3</td> <td>100 mg/m3</td> </tr> <tr> <td>PM 2.5</td> <td>16.3 to 37.6 mg/m3</td> <td>60 mg/m3</td> </tr> <tr> <td>SO2</td> <td>7.9 to 24.6 mg/m3</td> <td>80 mg/m3</td> </tr> <tr> <td>NO2</td> <td>12.2 to 30.8 mg/m3</td> <td>80 mg/m3</td> </tr> </tbody> </table>				Particular	Results	Standard	PM10	38.5 to 56.7 mg/m3	100 mg/m3	PM 2.5	16.3 to 37.6 mg/m3	60 mg/m3	SO2	7.9 to 24.6 mg/m3	80 mg/m3	NO2	12.2 to 30.8 mg/m3	80 mg/m3
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NO2	12.2 to 30.8 mg/m3	80 mg/m3																
Noise level (no. of locations) and results	8 No. of Locations of Noise Monitoring																	
	Day Time	44.6 to 49.8 Leq dB (A)																
	Night Time	40.1 to 42.4 Leq dB (A)																
Water Quality (no. of locations) and results	8 No. of Locations of Ground Water Quality Monitoring																	
	pH	7.4 to 7.9																
	Total Hardness	162 to 199 mg/l																
	Alkalinity	148 to 176 mg/l																
	TDS	228 to 384 mg/l																
	3 No. of Locations of Surface Water Quality monitoring:-																	
	pH	7.4-7.9																
	BOD	2.2-2.4 mg/l																
	COD	11.8-13.6 mg/l																
	DO	3.2-3.8 mg/l																

Soil Quality (no. of locations) and results	8 No. of Locations of Soil Quality Monitoring <table border="1"> <tr> <td>pH</td><td>6.74 to 7.85</td></tr> <tr> <td>Type of Soil</td><td>Silty Clay</td></tr> <tr> <td>Nitrogen</td><td>87.2 to 279.3 mg/kg</td></tr> <tr> <td>Phosphorus</td><td>16.8 to 60.7 mg/kg</td></tr> <tr> <td>Potassium</td><td>124.4 to 302.8 mg/kg</td></tr> </table>	pH	6.74 to 7.85	Type of Soil	Silty Clay	Nitrogen	87.2 to 279.3 mg/kg	Phosphorus	16.8 to 60.7 mg/kg	Potassium	124.4 to 302.8 mg/kg
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Type of Soil	Silty Clay										
Nitrogen	87.2 to 279.3 mg/kg										
Phosphorus	16.8 to 60.7 mg/kg										
Potassium	124.4 to 302.8 mg/kg										
Hydro geological study and results	The Project Proponent submitted that detailed hydrological study was conducted as per the guidelines issued by Central Ground Water Authority. As per the study the water table in area is about 29 m bgl (Pre-Monsoon) & 25 m bgl (Post-Monsoon). As per approved mining plan at the end of 4th year working the pit bottom will be 190 MSL (27 m bgl). Thus, the mine will intersect the ground water table during Post-Monsoon period of 4th year. Permission for Ground water abstraction was obtained vide letter no. CGWA/NOC/ MIN/ORIG/2023/18998, dated 11.08.2023. Permission for de-watering will be taken when required. There will be no considerable impact on ground water quality due to mining activity. However norms of CGWA regulations will be complied.										
Traffic study (no. of locations) and results	- The Project Proponent submitted that traffic survey was conducted at three stations TS-1 (T bend of Wegaon To Kumbharkhani Mine Road To Dongargaon), TS-2 (SH 233 T Bend To Wegaon Road (Near WCL Kumbharkhani Mine)) & TS-3 (SH 233 T Bend Wani - Mukutban Road). - As per traffic survey, the existing Volume in PUV/Hr at TS stations is 32, 95 & 235 respectively and existing Capacity of Road in PUC/Hr is 625 and LOS Value for existing traffic Scenario come under A (excellent at TS-1 & TS-2) and B (Very Good at TS-3). - After the operation of proposed mining only 30 PUC per/hr will increase. Hence, the carrying capacity of the road is accommodable for the proposed project.										

xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	1. Hitavada – 15.06.2023 2. "Lokmat" – 15.06.2023
Date of PH	17.07.2023
Venue	At Project site of Dongargaon Limestone Mining Project, Village-Dongargaon, Tehsil-Wani, District-Yavatmal.
Chaired by	Mr. Amol Yedge, IAS, District Magistrate Yavatmal, Chairman of Environment Public Hearing committee; SouHema Deshpande, Regional officer, Maharashtra Pollution Control Board Chandrapur as Member and Mr. Umashankar Bhadule, Sub Regional Officer, Maharashtra Pollution Control Board Chandrapur as convener.

Main issues raised during PH	Environment, Employment, Education and skill development training for youth, Plantation Programme, Land Compensation, CSR, Transportation, Water Level/Borewell Status / Surface Water.
Budget proposed for addressing issues raised during PH over 3 years	Rs.60 Lakhs (For Three years)

xiii. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that R&R Plan/compensation details for the Project Affected Family's / Project Affected People has been prepared and as per the Detailed Report prepared the total land required for the lease period (08 years) is 82.21 Hectares. The land purchase cost based on the best (maximum) of LARR Act, 2013 and Maharashtra State Policy & Annual Statement of Rates which is Rs. 13,42,94,000. However, land shall be purchased based on mutual agreement and consent of land owners. The land rates shall be in conformity to or higher than State Policy. Land purchase shall start after obtaining environmental clearance and mining lease grant order.

xiv. Court case details:

Court Case	Project Proponent submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an Affidavit in a non-judicial stamp paper of Rs 100 bearing 17AA 928904 dated 09.08.2022 stating that this mine will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
Plagiarism certificate	The head of the EIA Consultant certified that this EIA report has been evaluated using licensed software iThenticate plagiarism software and plagiarism was checked on 04.12.2023. The report produced has been analyzed by the system and based on it, I certify the EIA Report produces in accordance with good information technology practice.

xvi. Details of the Environmental Management Plan (EMP):

Sr. No.	ENVIRONMENT	Cost of EMP (Rs. in crores)	
		Capital Cost	Recurring Cost per Annum
A	ENVIRONMENTAL AIR MANAGEMENT		
1	Tanker mounted water sprinklers	0.400	0.150
2	Dust Mist canons	0.150	0.020
SUB TOTAL - A		0.55	0.17
B	ENVIRONMENTAL WATER MANAGEMENT		
1	Garland drains around mine pit	0.040	0.008
2	Silt Settling ponds	0.010	0.002

3	ETP (Capacity- 10 KLD, Oil and grease trap for workshop waste water)	0.100	0.025
4	STP (Capacity – 3 KLD, Sewage treatment for domestic waste water)	0.100	0.025
5	Rain Water Harvesting Structure	0.100	0.025
SUB TOTAL - B		0.350	0.085
C	ENVIRONMENTAL NOISE & GROUND VIBRATION MANAGEMENT		
1	Periodic maintenance of Equipment's, signage installation, weather cock, Noise barrier like green corridor and bund around sensitive receptor	0.010	-
2	Controlled blasting technique	0.100	0.010
SUB TOTAL - C		0.110	0.010
D.	ENVIRONMENTAL SOIL & WASTE DUMP MANAGEMENT		
1	Garland drain around dump (2m x 1.5m)	0.120	0.024
2	Toe wall (Height-2.0) around dump	0.120	-
SUB TOTAL - D		0.240	0.024
E	PLANTATION PROGRAMME		
1	Plantation near soil stripping stock and waste dump, along haul road, Safety Zone, backfilled area, acting noise barrier and upper benches in water filled area (38.94 ha with 39,210 no. of Plants@1500 per ha)	1.10	0.11
SUB TOTAL – E		1.10	0.11
F	TRANSPORT ROAD MAINTENANCE		
1	Strengthening of existing road and its maintenance to be used for transportation of mineral in association with local governance including Safety and speed signage on the road side	3.0	0.30
SUB TOTAL – F		3.0	0.30
G	WILD LIFE CONSERVATION PLAN FOR SCHEDULE-1 SPECIES		
1	Financial outlay for activities proposed in wildlife Conservation Plan of Schedule-I Species (Under Approval)	1.01	-
SUB TOTAL – G		1.01	-
H	BUDGET FOR PUBLIC HEARING ACTION PLAN	0.60	-

SUB TOTAL – H	0.60	-
GRAND TOTAL	6.96	0.699

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)		
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	EMP Cost	Capital Cost in Cr,	Recurring Cost in Cr,
	Proposed	6.96	0.699
Project Cost	45.35 Cr		
Employment (No.s)	92		

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC noted that instant mine is located adjacent to continuous forest patch having breeding tiger occupancy of Pandharkawada Forest Division and Tipeswar Wildlife Sanctuary and thus the EAC was of the view that the Ministry may seek comments from National Tiger Conservation Authority (NTCA) in this regard. The EAC also noted that a school and temple is located in the vicinity of the mine lease area. The EAC opined that the Project Proponent needs to submit the sequence of mining near the school & temple and to demonstrate that how the mining activity will not have impact on the school & temple. The EAC observed that the Project Proponent needs to increase the density of plantation as per the guidelines of Central Pollution Control Board (CPCB) and needs to submit the revised plan for greenbelt/plantation all along the mine lease boundary, safety zone plantation, dump area, backfilled area, two uppermost benches etc. The EAC observed that the mined out mineral will be transported to the crusher located in Mukutban mine by road at a distance of about 55 kms) and from there to Cement plant by OLBC (1.9 km). The EAC was of the view that the Project Proponent needs to explore the possibility of installing portable crusher within the instant mine lease area along with the timeline. The EAC also observed that the Project Proponent prepared the Wildlife Conservation Plan in discussion with the local villagers. The EAC noted that as per the authenticated list of flora and fauna letter dated 19.06.2023, Large Bengal Monitor Lizard is found in the core zone. The EAC opined that the Project Proponent needs to prepare the Wildlife Conservation Plan in a scientific way in consultation with the Forest Department. The EAC noted that the land purchase will start after obtaining Environmental Clearance and grant of order of mining lease. The EAC also asked the Project Proponent to submit the merits and demerits of land acquisition. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- The EAC noted that instant mine is located adjacent to continuous forest patch having breeding tiger occupancy of Pandharkawada Forest Division and Tipeswar Wildlife Sanctuary and thus the EAC was of the view that the Ministry may seek comments from National Tiger Conservation Authority (NTCA) in this regard.
- The Project Proponent needs to explore the possibility of installing portable crusher within the instant mine lease area along with the timeline.

- iii. The Project Proponent needs to submit the sequence of mining near the school & temple and also to demonstrate that how the mining activity will not have impact on the school & temple.
- iv. The Project Proponent needs to prepare the Wildlife Conservation Plan in a scientific way in consultation with the Forest Department. PP also needs to specify the activities proposed along with budget under Wildlife Conservation Plan.
- v. The Project Proponent needs to increase the density of plantation as per the guidelines of Central Pollution Control Board (CPCB) and also needs to submit the revised plan for greenbelt/plantation all along the mine lease boundary, safety zone plantation, dump area, backfilled area, two uppermost benches etc.
- vi. The Project Proponent needs to submit the merits and demerits of land acquisition. PP also needs to submit the phase wise land acquisition plan.

3.4.5. Recommendation of EAC

Deferred for ADS

Day 3 -28/12/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Proposed Rata - Mandha Limestone Mine (Auctioned Block) (Area 420.0 ha) with Limestone Production Capacity 1.5 Million TPA, along with Installation of Crusher 750 TPH at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan M/s. Deccan Cements Limited. by DECCAN CEMENTS LIMITED located at JAISALMER, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/453669/2023	IA-J-11015/48/2023-IA-II(NCM)	02/12/2023	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for mining of Limestone in Rata - Mandha Limestone Mine (Auctioned Block) of M/s Deccan Cements Limited with proposed Limestone Production Capacity: 1.5 Million TPA along with installation of Crusher 750 TPH in the mine lease area of 420.0 ha, located at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- The mine lease area is located between Latitude: 27°18'31.2441" N to 27°19'37.24040" N and Longitude: 70°52'13.80922" E to 70°53' 31.2778" E. The mine lease area falls under the Survey of India Toposheet No: G42E15 and falls in Seismic Zone-V.
- Details of Mine Lease:

S. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha

1.	Letter of Intent (LoI) for grant of mining lease granted vide LrNo. P.3(1) Khan/Group-2/2022 through e-auction process conducted by the Govt. of Rajasthan.	08.03.2023	Limestone (Major)	2 years	Govt. of Rajasthan	420.00 ha

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	57.21 ha
Government waste land	362.79 ha
Forest Land	-
Total Mining lease area (MLA), Ha	420.0 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the MLA area.

v. Details of Mining Plan:-

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/11/2023-AJM-IBM_RO_AJM
	Date	08.09.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	420.00 ha
	Validity	5 years from the date of Mining Lease registration
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Mining will be done by mechanized opencast method using Hydraulic excavator/loader. Drilling will be carried out with the help of hydraulic drill machines equipped with arrangement for wet drilling, dust collectors and sample collection. Controlled blasting will be carried out. No secondary blasting is proposed. Rock breaker will be deployed for breaking the oversized boulders. To control the ground vibration as well as fly rock only 100% Non-Electric (NONEL) detonators will be used.	
Geological Reserves	209.71 Million TPA (As on 10.08.2023)	
Mineable Reserves	168.83 Million TPA (As on 10.08.2023)	
Breakup of Total Excavation (Tops oil/OB/SB/IB/Mineral Rejects/ Waste)	Total Excavation: 1.56 Million TPA Breakup of Total Excavation:	

e, MTPA)	1. Limestone: 1.50 Million TPA 2. Over Burden: 0.06 Million TPA
Life of mine	116 years (As on 10.08.2023)
Mine Bench Height & Bench Width	Bench height: 9 m (During plan period), 8 m (During conceptual stage). Bench Width: 25 m (During plan period), 9 m (During conceptual stage).
No. of Mine Benches	2 (In Pit 1) [during plan period], 5 (In Pit 3) and 4 (In Pit no 1 & 2) [During conceptual stage]
Existing Depth, m bgl	It's a greenfield project and hence not applicable.
Ultimate Depth of Mining, m bgl	140 m RL (32 m) (In Pit no 1 & 2) 132 m RL (40 m) (In Pit 3)
Ground Water Table, m bgl	70 m bgl
Details of ground water intersection	The water table in the area is about 70 m deep and the ultimate working depth will be 40 m bgl. Thus, water table will not be intersected during mining at any stage.
Individual bench slope	80°
Overall pit slope	45°
Details of existing/ proposed Crusher	Capacity of 750 TPH crusher is proposed.
Mineral Beneficiation	Nil
RoM output size	Nil
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by dumpers via haul road and it will be transported to end users via road or belt conveyor.
Generation of Top soil/OB & its Management during plan period & conceptual period.	Over Burden: - During the plan period 0.064 Million Tonnes of waste will be generated which will be stacked temporarily and will be utilized further for backfilling. - During conceptual stage, 18.83 Million Tonnes of waste will be generated, out of which 18.45 million tonnes of waste will be backfilled over an area of 23.07 ha and remaining 0.38 million tonnes of waste will be stacked in dump over an area of 5.04 ha which will be rehabilitated by plantation.

Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	70 KLD	Domestic	10.0 KLD
		Dust suppression	35.0 KLD
		Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	IGNP canal (SagarmalGopa Branch) and mine sump as and when developed. Permission will be taken from competent authority for using of canal water.		
Permission for withdrawal/ intersection along with details of grant and its validity	The water table in the area is about 70 m deep and the ultimate working depth will be 40 m bgl. Thus, water table will not be intersected during mining at any stage and hence permission is not required.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Kinya	~1.2 km in NW direction
Nearest Town	Jaisalmer	~111 km in SE direction
Nearest State/National Highway	MDR-103	~4.3 km in NNE direction
	MDR-19	~5.4 km in NW direction
Interstate Boundary	None	None
Railway Station/Railway line	Jaisalmer Railway Station	~44 km in SSE Direction
Water Bodies	Indira Gandhi Canal (SagarmalGopa Branch)	~4.5 km in NNE direction
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area. Letter from competent authority will be taken.

National Park	No	No National Park, Wildlife Sanctuary, Elephant/Tiger Reserve involved in study area. Letter from competent authority will be taken.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) / Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study will be carried out, if any schedule - I species found in the study area Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be under 76.052 ha (6.127 ha area on 7.5 m lease periphery +5.04 ha on waste dump + 23.07 ha on backfilled area + 20.94 ha on 2 no of top most benches + 20.875 ha on 45 m safety one of tar road).
Budget for green plant & plantation till the end of life of mine.	Rs. 2.30 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	50no.s
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	6.127 ha
50 m safety zone of nallah, roads, electric lines	20.875 ha
500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the total mine lease area is 420 ha, out of which 57.21 ha is private land. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	- The e-auction organized for a Rata Mandha Limestone block. The initial attempt didn't receive any bids at the 10% reserve price. - In the second attempt of auction, DCL and SCL participated in which the highest bid of 10.40 percent was proposed by SCL which was declared as Preferred Bidder. Considering that the bid submitted by SCL was relatively less received by the State Government and considering the revenue interest involved in the matter and wider public interest and government revenue, the bid submitted by M/s Shree Cement Limited was rejected. - Following the rejection, Shree Cement Limited filed a case (Civil Writ Petition No. 16345/2018) before the Honourable High Court in Jodhpur against the government's order dated July 23, 2019. As of now, no stay order has been issued by the Honourable Court, and the case remains pending. - In the third attempt of auction, M/s Deccan Cements Limited declared as the Preferred Bidder with a winning bid of 15.25% in the e-auction conducted on 16.12.2021 and LOI has been issued by Government of Rajasthan vide letter No. P.3(1) Khan/Group-2/2022 dated 08.03.2023 for grant of Mining Lease for the said Block for a period of 2 years.
Undertaking by Project Proponent w.r.t court case	N/A

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non judicial stamp paper of Rs 100 bearing no: AN 756550 dated 01.12.2023 stating that the company undertakes by affidavit that it will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 45 Crores
Employment	68 persons

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Project Proponent/EIA Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent showed the boundary of the mine lease area. The Project Proponent informed the EAC that One HT line passes through mine lease area. Safety barriers are left in both sides of HT line and the same will not be disturbed at any stage of mining activity. Tar road of length of 2.20 km exists within the mine lease area. Nearest village is Khinya Village located at a distance of ~1.2 km in NW direction. A School is also located in Khinya Village. Nearest water body is Indira Gandhi Canal (~4.5 km, NNE). Dumpers of 20 Tonnes capacity bucket capacity will be used for transportation of mineral from mine face to the crusher. During the initial period of 2 years, Limestone produced from this mine will be directly sold in open market and then in fourth/fifth year Limestone will be used in upcoming cement plant which will be installed in the year 2030. During the first two years, Limestone will be

transported by road at a distance of 50 km to the Sanu railway siding. The EAC was of the view that the Project Proponent needs to double the width of road. The Project Proponent informed the EAC that at the end of conceptual stage, an area of 329.45 ha will be excavated out of which 285.44 ha will be converted into water reservoir, 23.07 ha will be backfilled and an area of 20.94 ha will be reclaimed on top most 2 benches. During conceptual stage, about 18.83 Million Tonnes of waste will be generated, out of which 18.45 million tonnes of waste will be backfilled over an area of 23.07 ha and remaining 0.38 million tonnes of waste will be stacked in dump over an area of 5.04 ha which will be rehabilitated by plantation. Till 30 years, mining will be carried out in Govt. land.

The EAC asked about the status of court case. The Project proponent informed the EAC that initially e-auction organized for the Rata Mandha Limestone block. The initial attempt didn't receive any bids at the 10% reserve price. In the second attempt of auction, Deccan Cements Limited (DCL) and Shree Cement Limited (SCL) participated in which the highest bid of 10.40 percent was proposed by SCL and declared as a Preferred Bidder. Considering that the bid submitted by SCL was relatively less and considering the revenue interest involved in the matter and wider public interest and government revenue, the bid submitted by Shree Cement Limited was rejected. Then, the Shree Cement Limited filed a case (Civil Writ Petition No. 16345/2018) before the Hon'ble High Court in Jodhpur against the Govt. order dated July 23, 2019. As of now, no stay order has been issued by the Hon'ble Court, and the case remains pending. Next date of hearing is 23.04.2024. In the third attempt of auction, M/s Deccan Cements Limited declared as the Preferred Bidder with a winning bid of 15.25% in the e-auction conducted on 16.12.2021 and accordingly Letter of Intent (LoI) for grant of mining lease was granted by the Govt. of Rajasthan vide letter dated 08.03.2023 for the said block for a period of 2 years. The EAC opined that the instant Terms of Reference would be subject to the outcome of the court case filed before the Hon'ble High Court in Jodhpur in Civil Writ Petition No. 16345/2018.

Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s Deccan Cements Limited for mining of Limestone in Rata - Mandha Limestone Mine (Auctioned Block) with proposed Limestone Production Capacity: 1.5 Million TPA along with installation of Crusher 750 TPH in the mine lease area of 420.0 ha, located at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

3.1.5. Recommendation of EAC

Recommended

3.1.6. Details of Terms of Reference

3.1.6.1. Specific

Action plan for plantation/greenbelt	
1.	The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
Court Case	
1.	The instant Terms of Reference would be subject to the outcome of the court case filed before the Hon'ble High Court in Jodhpur in Civil Writ Petition No. 16345/2018.
Drone Survey	
1.	
Environment Monitoring & EMP	
1.	The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.

2.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
Groundwater	
1.	The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
2.	The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
3.	The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
Illegal mining	
1.	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Deccan Cement Ltd or not?
OLBC	
1.	The Project Proponent needs to submit the timeline and action plan for transporting the Limestone through OLBC.
Plan for Resettlement	
1.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. An action plan for land acquisition in consent with the local people also needs to be submitted. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
Plan for restoration of ecology	
1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
Plan for sequence of mining and backfilling	
1.	The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
Skill Development	
1.	The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
Socio Economic	

1.	The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

Transportation (Road)

1.	The Project Proponent shall submit the action plan along with timeline for doubling the width of the village road which is to be used for transportation.
2.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road, existing and additional traffic load to the NH/SH/MDR and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.

Tree transplantation

1.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.

Water bodies

1.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

3.1.6.2. Standard

1(a)	Mining of minerals
Baseline Environment	
1.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.
1.	One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
1.	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.
Court Matters	
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against

	the Project should be given.
Critically Polluted Areas, Aravali & CRZ	
1.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
Environmental Monitoring and Management	
1.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.
Forest	
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.
1.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
1.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
1.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
Hydro Geology	
1.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.
1.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

1.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
Land Acquisition and R&R	
1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
Land Environment	
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.
1.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
1.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
1.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
Miscellaneous	
1.	The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
Project Details	

1.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1.	A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its initial grant to subsequent renewals/ transfer/extension of validity.
1.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
1.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
1.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
1.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
1.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
1.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
1.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identify grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The

	production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.
1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1.	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon'ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

Risk Assessment & Disaster Management

1.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
1.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
1.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

Socio-Economic Environment

1.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
1.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
1.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

Transportation

1.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

Water Environment

1.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided.

	Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.
1.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

Wildlife

1.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.
1.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted.
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Mr Pankaj Verma	Scientist E	pan*****@nic.in	
2	Dr Dinesh Misra	IFS (Retired)	dmi*****@gmail.com	
3	Sh Niranjana Kumar Vasu	Member (EAC)	vas*****@gmail.com	
4	Dr Asha Rajvanshi	Member (EAC)	ash*****@gmail.com	
5	Shri Avijit Gosh	Member (EAC)	avi*****@gmail.com	
6	Shri Bandi Ramchandra Reddy	Member (EAC)	red*****@gmail.com	
7	Prof Pramod Kumar	Member (EAC)	nit*****@yahoo.com	Absent
8	Prof Devesh Walia	Member (EAC)	dev*****@gmail.com	Absent
9	Dr Suresh Tiwari	Member (EAC)	smb*****@gmail.com	
10	Dr K G Asha Manjari	Member (EAC)	kim*****@gmail.com	
11	Prof Dev Dutt Sharma	Member (EAC)	dds***@gmail.com	Absent

12	Shri Mohammad Niyazi	Member (EAC)	dir*****@gmail.com	
13	Mr V K Soni Representative of IMD	Member (EAC)	vij*****@imd.gov.in	Absent
14	Dr Y G Kale Representative of IBM	Member (EAC)	ygk***@ibm.gov.in	Absent



**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR**

SUMMARY RECORD OF 24TH MEETING OF THE COMMITTEE OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 24th meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 26-28 December, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023:

The minutes of the 23rd EAC meeting held during 5-7 December, 2023 were placed before the members of the EAC.

Day 1: 26th December, 2023 (Tuesday)

1.1 Majhgawan Diamond Mine, Panna of M/s NMDC Ltd. with total excavation of 13.90 LTPA [ROM Kimberlite Ore @ 8 LTPA and Overburden removal @5.90 LTPA] for production of 1.00 lakh carats of Diamonds per annum in the mine lease area of 113.332 Ha, located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh -[F.No: J-11015/120/2018-IA-II(M), Proposal No: IA/MP/MIN/442288/2023, EIA Consultant: M/s Ecomen Laboratories Ltd] - Revalidation of EC under Ministry's Notification vide S.O. (E) 1530, dated 06.04.2018

The instant proposal is for mining of Diamond in Majhgawan Diamond Mine with total excavation of 13.90 LTPA [ROM Kimberlite ore @ 8 LTPA and Overburden removal @ 5.90 LTPA for production of 1.00 lakh carats of Diamonds per annum] in the mine lease area of 113.332 Ha (Main Lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 02.12.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observation of EAC and compliance made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent																																																																
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		has not obtained requisite clearances. Additionally, having regard to the nature of the mining activity and the mischief that may arise from the abandonment of the mining activity, leaving the mined area with all its exposures, would also be a distinguishing factor. While on the prima facie reading on the two orders dated 26.04.2023 and 28.04.2023, do seem to suggest against undertaking mining activities within the prohibited areas, as already stated above in view of the clearance given by the Supreme Court, it appears to me that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted.
3	The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.	The ESZ Division gave their comments on 12.10.2023 stating that <i>“Mining within ESZ is a prohibited activity. This has been reiterated by the Supreme Court Order dated 28.04.2023, irrespective of whether the mining is beyond 1.0 km from the boundary of the protected area, in case ESZ extends beyond 1.0 km.”</i> The comments of the Wildlife Division obtained on 19.11.2023 are as follows:- The proposal for wildlife clearance under the Wildlife (Protection) Act, 1972 of Majhgawan Diamond Mine of M/s NMDC Ltd was recommended by the Standing Committee of National Board for Wildlife in its 61st meeting held on 18th February, 2021 subject to the conditions imposed by the Chief Wild Life Warden and the National Tiger Conservation Authority. The recommendations of NTCA were subject to approval of Hon'ble Supreme Court. The Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve.”

		Subsequently, Hon'ble Supreme Court vide its order dated 26.04.2023 in IA 131377 of 2022 filed by the Ministry in W.P. (C) no. 202 of 1995 has directed that <i>"mining within the National Park and Wildlife Sanctuary and within an area of one kilometre from the boundary of such National Park and Wildlife Sanctuary shall not be permissible."</i> If any clarification is required on the matter, the IA Division may seek the same from Hon'ble Supreme Court."

3. Observation and Recommendation of the EAC:

The Member Secretary informed the EAC that officials from National Tiger Conservation Authority (NTCA) and Wildlife Division in the Ministry were invited as a Special Invitee to discuss the matter. The EAC asked the Project Proponent to brief about the legal aspects of Main and Supplementary mine lease. The Project Proponent briefed about the chronology of the legal aspects since from the grant of mining lease in the year 1965 to till the order of the Hon'ble Supreme court orders dated 26.04.2023 and 28.04.2023. The Project Proponent informed the EAC that at the time of sanction of grant of mining lease, the instant leases were outside the Panna (Gangau) Wildlife Sanctuary. The Panna Wildlife Sanctuary was notified in the year 1975 and later in the year 1994, the Govt. of India declared it as a Project Tiger Reserve. Then in the year 2005, the Director, Panna National Park informed that both the mine leases fall within Gangau Wildlife Sanctuary. Thereafter, the mining operations were suspended in the year 2005 and plant operations in the year 2006.

Further, the Project Proponent informed the EAC that EC was obtained in the year 2006 under EIA,1994 subject to acceptance by the Standing Committee of the National Board of Wildlife as well as permission from Hon'ble Supreme Court of India. The mining operations resumed in the year 2009 after obtaining all approvals and the permission was valid upto 31.12.2020. Again mining operations were stopped w.e.f 01.01.2021. In order to expedite the balance reserves, the application for renewal of Wildlife Clearance was submitted. The DIG, NTCA on 15.02.2021 conveyed the recommendations subject to fulfillment of conditions laid down by Chief Wildlife Warden (CWLW), Madhya Pradesh. The CWLW while forwarding the proposal to the Ministry specifically mentioned that the NMDC again should obtain the permission from the Hon'ble Supreme Court. Then, an IA was filed in the Hon'ble Supreme Court and the Hon'ble Supreme Court vide order dated 30.11.2022 stated that the present application deserves to be allowed and renewal of Wildlife Clearance was granted by CWLW on 24.02.2023. The Hon'ble Supreme Court vide its order dated 26.04.2023 and

28.04.2023 directed that *“any activity, which is prohibited by both the guidelines as well as the ESZ notification shall strictly be prohibited. Since the mining activity in ESZ area is a prohibited activity, there is no question of such an activity being permitted in an ESZ area even if it falls beyond the distance of one kilometer from the boundary of the protected area”*.

The Project Proponent also briefed about the legal opinion obtained from the Attorney-General for India on 23.11.2023. The Attorney-General for India has opined that the orders passed by the Hon'ble Supreme Court on 26.04.2023 and 28.04.2023 over rules all earlier orders are misconceived. The order passed by the Supreme Court on 30.11.2022 was with full knowledge and understanding about the national park aspect. A subsequent order cannot be said to have overruled an earlier order unless the earlier order is directly put to rest, considered and dealt with. Also, there is no room for overruling by implication also unless the subjects of the two proceedings are common. Therefore, the order dated 30.11.2022 may have to be treated as a standalone order. It cannot be compared to any other mining activity which has not obtained requisite clearances. In view of the clearance given by the Supreme Court, it appears to that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted. The EAC noted that the Wildlife Division has informed that if any clarification is required on the matter, the IA Division may seek the same from Hon'ble Supreme Court. The officials of NTCA and Wildlife Division opined that the instant file may be sent to the NTCA to offer further comments in the instant matter.

The Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area and in the study area of 10 km radius. The Project Proponent explained about the site features in the main mine lease area. The Project Proponent showed the existing working pit of 120m deep. The mining operations mainly will be carried out in the main mine lease and plant operations will be carried out in the supplementary mine lease for recovery of diamonds. Tailing pond is partly located within main mine lease and partly in supplementary mine lease. Water is re-circulated into the plant. The Project Proponent showed the processing plant, existing coarse tailing dumps, existing and proposed waste dumps and ore stack yard. The main mine lease does not involve forest land and the supplementary mine lease involves forest land of 74.018 ha and the Forest Clearance is co-terminus with extended lease period up to 30/6/2040. Water will be utilized from water reservoir built by NMDC. Renewal application was made to CGWA for obtaining approval for dewatering of 321.0 KLD and the same is awaited.

The Project Proponent informed the EAC that baseline data was conducted during December, 2020 – February, 2021 (Winter Season) and then revalidated by collecting one-month fresh baseline data by new EIA Consultant M/s Ecomen Laboratories (P) Limited from 1st October, 2023 – 30th October, 2023. The revalidation

of baseline data was compared with initial baseline data generated during 01.12.2020 to 28.02.2021 and it was found that the revalidation of baseline data similar with previous baseline data and no major variations was observed during the recent study. Till date about 1.95 Lakhs saplings have been planted including both the leases as well as in surrendered areas. The monitoring committee suggested to remove the exotic species. No R&R issues are involved. The action plan for removal of exotic species is yet to be approved by PTR. Total height of dump will be around 25-30 m. The EAC asked the Project Proponent to ensure that no washouts should reach the village. The total excavated area will be 23.576 ha, out of which 3.07 ha will remain as water body at lower benches and the remaining area of 20.506 ha will be covered under plantation. OB & Tailing dump, mineral storage and infrastructure will also be covered under plantation. After removal of tailings, the tailing pond will be developed as a rain water reservoir. No backfilling is envisaged. Advertisement for public consultation was advertised on 20.07.2023 and the Madhya Pradesh Pollution Control Board vide letter dated 22.08.2023 forwarded the objections/suggestions received. The main concerns of the locals were related to drinking water, skill development, improvement of facilities etc., The budget proposed to address the concerns works out be Rs. 252 lakhs for both main mine lease and supplementary mine lease. A capital cost of Rs 342 Lakhs and a recurring cost of Rs 54.5 Lakhs have been earmarked towards Environment Management Plan. The Project Proponent explained about the processing of plant operations. The EAC asked the Project Proponent whether any chemical is added during mineral processing. The Project Proponent informed the EAC that ferro silicon is added to maintain the density.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC opined that the Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals.
- ii. The Ministry to seek comments from National Tiger Conservation Authority (NTCA) and Wildlife Division in the instant matter.

1.2 Majhgawan Diamond Mine, Panna of M/s NMDC Ltd. for 0.72 LTPA of over burden removal and Processing of Kimberley ore (8 LTPA) for production of 1.00 lakh carats of Diamond per annum with the mine lease area of 162.631 Ha (Supplementary Mine lease), located at village Majhgawan, Tehsil & District Panna, Madhya Pradesh – [F.No: IA-J-11015/121/2018-IA-II(M), Proposal

no:IA/MP/MIN/442291/2023; EIA Consultant: M/s. Ecomen Laboratories Private Limited] - Revalidation of EC under Ministry's Notification vide S.O. (E) 1530 dated 06.04.2018

The instant proposal of M/s NMDC Ltd. is for mining of Diamond in Majhgawan Diamond Mine for 0.72 LTPA over burden removal and processing of Kimberlite ore of 8.0 LTPA for production of 1.00 lakh carats of Diamond per annum in the mine lease area of 162.631 Ha (Supplementary mine lease), located at Village Majhgawan, District Panna, Madhya Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information. Then the Project Proponent submitted the information on 02.12.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observation of EAC and compliance made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent															
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		2	Electrical Conductivity (µS/cm)	154 - 234	221 – 274
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		6	Potassium (kg/Ha)	468 – 581.8	134 – 203
2	The EAC opined that the Project Proponent may seek a legal opinion regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposal.	The Project Proponent submitted the legal opinion obtained from the Attorney-General for India on 23.11.2023. The Attorney-General for India has opined that the orders passed by the Supreme Court on 26.04.2023 and 28.04.2023 overrules all earlier orders is misconceived. As subsequent order cannot be said to have overruled an earlier order			

		unless the earlier order is directly put to rest, considered and dealt with. There is no room for overruling by implication also unless the subjects of the two proceedings are common. The order passed by the Supreme Court on 30.11.2022 was with full knowledge and understanding about the national park aspect. It was on the strength of that order, that all statutory authorities applied their mind, more particularly on the need and relevance of the closure of the mining activities and its importance. As a result, the order dated 30.11.2022 may have to treated as a standalone order. It cannot be compared to any other mining activity which has not obtained requisite clearances. Additionally, having regard to the nature of the mining activity and the mischief that may arise from the abandonment of the mining activity, leaving the mined area with all its exposures, would also be a distinguishing factor. While on the prima facie reading on the two orders dated 26.04.2023 and 28.04.2023, do seem to suggest against undertaking mining activities within the prohibited areas, as already stated above in view of the clearance given by the Supreme Court, it appears to me that the Querist has a legitimate claim for further undertaking of the mining activity strictly in terms of the approval granted.
3	The EAC also opined that the Ministry may seek comments from the ESZ Division since the project is located within the Gangau wildlife sanctuary of Panna Tiger Reserve and whether the aforesaid orders dated 26.04.2023 and 28.04.2023 are applicable in the instant proposal or not.	The ESZ Division gave their comments on 12.10.2023 stating that <i>“Mining within ESZ is a prohibited activity. This has been reiterated by the Supreme Court Order dated 28.04.2023, irrespective of whether the mining is beyond 1.0 km from the boundary of the protected area, in case ESZ extends beyond 1.0 km.”</i> The comments of the Wildlife Division obtained on 19.11.2023 are as follows:- The proposal for wildlife clearance under the Wildlife (Protection) Act, 1972 of Majhgawan

		Diamond Mine of M/s NMDC Ltd was recommended by the Standing Committee of National Board for Wildlife in its 61st meeting held on 18th February, 2021 subject to the conditions imposed by the Chief Wild Life Warden and the National Tiger Conservation Authority. The recommendations of NTCA were subject to approval of Hon'ble Supreme Court. The Hon'ble Supreme Court order in I.A No: 1485 and 1507 dated 13/8/2008 and I.A No: 47252 of 2021 dated 30/11/2022 in W.P (Civil) no: 202 of 1995 permitted mining operations in Diamond Mining Project, Panna in Gangau wildlife sanctuary of Panna Tiger Reserve." Subsequently, Hon'ble Supreme Court vide its order dated 26.04.2023 in IA 131377 of 2022 filed by the Ministry in W.P. (C) no. 202 of 1995 has directed that <i>"mining within the National Park and Wildlife Sanctuary and within an area of one kilometre from the boundary of such National Park and Wildlife Sanctuary shall not be permissible."</i> If any clarification is required on the matter, the IA Division may seek the same from Hon'ble Supreme Court."

2. Observation and Recommendation of the EAC:

The instant proposal of supplementary mine lease was appraised together with main mine lease as both the mine leases are contiguous. After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC opined that the Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 for the instant proposals. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to seek clarification from the Hon'ble Supreme Court regarding the applicability of the orders dated 26.04.2023 and 28.04.2023 in this instant proposals.

- ii. The Ministry to seek comments from National Tiger Conservation Authority (NTCA) and Wildlife Division in the instant matter.

1.3 Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa - [F.No: IA-J-11015/3/2023-IA-II(NCM), Proposal No: IA/GA/MIN/442593/2023, EIA Consultant: M/s Mineral Engineering Services] – Environmental Clearance (EC)

The instant proposal is for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) of M/s Vedanta Limited with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 15°34’20.518”N to 15°36’54.018”N and Longitude: 73°54’4.754”E to 73°57’09.51”E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.
- iii. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information and site visit report of the subcommittee. Accordingly, site visit was carried out during 29-31 October, 2023 and then the Project Proponent submitted the information along with compliance of site visit report on 04.12.2023 in Parivesh portal and hence the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observations of sub-committee during site visit (29-31 October, 2023), the project proponent provided the following compliances:-

S. No	Observation of subcommittee during site visit held during 29-31 October, 2023	Reply by Project Proponent
1	The Project Proponent needs to submit the techno economic feasibility report for laying Over Land Belt Conveyor (OLBC) from the mine lease area to Sarmanas Jetty.	The Project Proponent submitted that transportation route from mine site to jetty currently covers a total distance of 5.48 kms (4.54 dedicated road and 0.94 km MDR-20 Public Road). Based on the present capacity of the tippers, 1205 trips are required per day and the present road network is adequate for the purpose with widening and strengthening of some patches. The preliminary Techno-Economic feasibility study has been undertaken and prima facie it does not look feasible to switchover to OLBC system considering the terrain of the likely route having mounds and low-lying areas, vegetation/forest patches and its likely degradation, accessibility, environmental impacts and safety issues, technologies available, cost of the system, implementation period via-a-vis remaining reserves in the mining lease. The Project Proponent also submitted the preliminary Techno-Economic feasibility issues for laying Over Land Belt Conveyor (OLBC) from the mine lease area to the Sarmanas Jetty along with cost and timeline comparison for conveyor system and dedicated road.
2	The subcommittee asked the Project Proponent to submit the ecology restoration plan for mined out pits for using as Water reservoir/Pisciculture.	The Project Proponent submitted that the Ecology Restoration or Mine Reclamation activities at Block I Bicholim Mineral block will be carried out concurrently with mining operations. The company has in-house experienced team having experience of mine land reclamation. The company also proposes to collaborate and take support of various reputed institutes and consultancy firms in ecology restoration of the area more importantly the local stake holders will be consulted in the process of ecology restoration. The Project Proponent also submitted that at conceptual stage, 20 ha area will be converted into water reservoir & 293.5 ha will be converted into backfilled area. Backfilled area will be reclaimed & rehabilitated by the plantation. At conceptual stage around 105 ha (21.94% of the total project area) of land will be brought under plantation. The plantation will comprise of saplings of native species which are generally grown in the state of Goa. The plantation would be a mix of various forest and fruit tree species and

		technical advice would be taken from state forest and agriculture departments. The saplings will be procured from various nurseries like forest department nursery, nurseries developed by locals and also from companies in-house root trainer nursery. Further, the Project Proponent submitted that the Block-I Bicholim Mineral Block is already having a 7.5m wide green belt all along the mine block boundary except the areas where the mine block shares a common boundary with adjoining mine block. A 50m green belt exists towards the habitation within the lease and the same would be further strengthened and maintained. A dedicated 200m green belt would be developed and maintained towards the Idgah area. A density of 2500 saplings per ha will be maintained. Extensive plantation would also be done along the sides of connecting roads. The waste dump slopes will be covered with laterite material and then with biodegradable geotextile mats which will prevent soil erosion of the dump slopes and thus will facilitate the growth of native species. Grass seeds will be sprinkled on the dump slopes so that the same germinate during rains. The top of dump areas / levelled areas will be properly planned and developed in to theme based gardens which can be a attraction for school students, tourist etc. Some of the mined-out pits will partially backfilled and retained as water bodies. For instance, 1 Top pit and 5 Bottom pits will be finalized by end of first mine plan period and will be taken up for ecology restoration initiatives. The company will collaborate with state fisheries department to develop Pisciculture in the water body developed in the mine pits. Local youth will be provided training through the fisheries department so that they manage and maintain the Pisciculture project.
3	The subcommittee noted that the transfer of material from one pit to other working pit will lead to transportation issues. The subcommittee asked the Project Proponent to identify	The Project Proponent submitted that as suggested by the Hon'ble Committee detailed study of mineral transportation from one pit to another pit including sequential mining has been carried out. The company has explored the possibility of concurrent backfilling and it will be possible only from 5th to 10th year. The Project Proponent submitted the google image showing the existing available pits for backfilling and

	the shortest lead distance and also to explore the possibility of concurrent backfilling. The Project Proponent also needs to submit the sequential stage wise mining in top and bottom working pits and their backfilling plan.	proposed pits for backfilling. The Project Proponent also submitted the details of existing pits, area, depth and volume for backfilling and also the proposed working pits, area, depth and volume available for backfilling. Further, the Project Proponent submitted the year wise sequential mining & backfilling plan.
4	The Project Proponent needs to submit the action plan for strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge. The action plan for monitoring the water level and water quality before discharge needs to be submitted.	The Project Proponent submitted that at conceptual stage, total 12 no.s of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds. The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M3 of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M3. Further, the Project Proponent submitted that entire monsoon runoff is channelized into mine pits and supernatant water flows into series of settling ponds through drains. The clear water is allowed to naturally overflow by Header arrangements or through check dams. In case required, Lime or combination of Lime and flocculent is used in the mine pit or settling pond so that the particles settle, and clear water is discharged. The discharge water is monitored regularly so that water quality meets the prescribed limits. The inhouse Environment management cell will undertake the regular

		monitoring and analysis of discharge water through Environment laboratory recognized by MoEF&CC. The monitoring reports will be submitted to Goa State Pollution Control Board on monthly basis and MoEF&CC Regional office on six monthly basis. Surface water samples shall be collected at 8 locations which include all the mine discharge points and upstream and downstream of Bicholim and Asnora river. Samples shall be collected once a month. The parameters listed in IS: 2296 shall be monitored. During monsoon season, in addition to the monthly monitoring, all the discharge points will be regularly monitored (on all the rainy days) and the TSS levels will be checked.
5	The design of garland drain around the waste dumps to divert the water to settling ponds and the measures to be taken to arrest the suspended solids needs to be submitted. The measures to be taken for preventing the soil erosion on slope of waste dumps needs to be submitted.	The Project Proponent submitted that the dimensions of the drains will be maintained with width of 2m and 1.5 m in depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get overflowed from the drains. The available garland drains are 11313 m in length which covers all the dumps within the mine lease area. The same will be strengthened and maintained before the onset of monsoon. The daily average surface run-off is estimated as 14003 m³. The garland drains have the capacity to accommodate instant volume of 33939 m³ as per above dimensions. Therefore, garland drains capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. Therefore, water management structures comprising of drains, settling ponds and mined out pits are available as well as planned to address the catchment area run-off for conceptual period. The Project Proponent also submitted the measures to be taken to arrest the suspended solids and for preventing the soil erosion on slopes of waste dumps for preventing the soil erosion on slope of waste dumps which are as follows: - Inward slope will be provided to all the dump benches so that the water doesn't flow over the slope and erodes the dump slope surface - Covering the finalised dump slope with lateritic material and then covering with coir geotextiles - Use of ERW pipes between benches to channelise the surface runoff water and diverting to settling

		ponds. iv. Boulder walls 1.5m ht and 2m wide will be provided at the toe of the dump to arrest the flow of silt. v. Garland drains around the dump is constructed 1m bottom width, 2m top width and 1m deep with a length of 6100 m to divert water to settling pond for arresting the suspended solids. vi. Use of Stylo grass seeds and Glyricidia cuttings at the onset of monsoon to create green cover on the dump slopes. vii. Annual Plantation of native species on waste dump. viii. Safety green belt /barrier of 50 mts shall be maintained near the Assonora river from the mine pit. ix. Annual de-siltation of the settling ponds, drains. x. Use of lime and flocculants in case required so as to settle the suspended solids in settling pond.																		
6	The Project Proponent needs to submit the action plan for installing permanent water sprinklers.	The Project Proponent submitted that permanent water sprinklers with 3.40 km length along the haul road within the ML area and 2.80 km length outside the ML area on either side of the road will be installed. Sprinklers will be spaced at 12m distance covering 6m radius at 180 degree. Estimated budget for the installation of the same is Rs. 191.60 Lakhs. <table border="1"> <thead> <tr> <th>S. No</th><th>Description</th><th>Cost (Rs. In Lakh)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Civil Works</td><td>20.0</td></tr> <tr> <td>2</td><td>Pump & Sprinkler System</td><td>88.0</td></tr> <tr> <td>3</td><td>Pipeline</td><td>75.60</td></tr> <tr> <td>4</td><td>Electrical Works</td><td>8.0</td></tr> <tr> <td></td><td>Total</td><td>191.60</td></tr> </tbody> </table> The Project Proponent also submitted the map showing the layout of proposed water sprinklers within mine lease area and along dedicated road.	S. No	Description	Cost (Rs. In Lakh)	1	Civil Works	20.0	2	Pump & Sprinkler System	88.0	3	Pipeline	75.60	4	Electrical Works	8.0		Total	191.60
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7	The Project Proponent needs to submit the action plan and timeline to modify the crushing and screening units. The Project Proponent also needs to submit the material flow sheet and material balance.	The Project Proponent submitted that Crushing & screening units will be modified within 4 months after obtaining the Clearances. Budget proposed for the same is Rs. 6.97 Crore. The Project Proponent also submitted the flow Sheet of Crushing & Screening Unit.																		
8	The Project Proponent needs to	The Project Proponent submitted that it is proposed to develop nursery adjacent to the mineral block (Survey no																		

	submit the action plan for developing their own nursery by mentioning the details of the area to be covered, species to be planted and budget proposed. Most of the standing vegetation in the lease area constitutes of <i>Acacia auriculiformis</i> and <i>Casuarina equisetifolia</i> and it is further invading the open areas through natural regeneration. The invasion may be checked through planting native species in the region.	72/4 in Bicholim Village). Around 1100 sq.m of area will be utilized for the nursery. A budget of Rs. 5 lakh is kept for the same. The nursery will comprise of following: - A poly house/ nursery shed will be developed where in a root trainer nursery will be established. - Production area wherein various jobs like filling of root trainers/polybags will be undertaken store room wherein the nursery equipment's will be stored - Only native / local species of various horticultural and forest species will be grown in inhouse nursery or sourced from forest department nursery for planting in the finalised areas within the Mineral block. - Necessary technical support will be taken from state forest department. Company also carries out collaborative mine reclamation projects in association with research institutes like NEERI, Goa university etc. - Horticultural species like Mango, Cashew, Ber, Aonla, Jambul, Tamarind, Jackfruit, citrus species, etc will be grown - Forest species like various <i>Terminalia tomentosa</i>, <i>Terminalia bellerica</i>, <i>Bauhinia</i> species, Teak, <i>Cassia fistula</i>, Arjun, Assan, <i>lagerstromia</i> species, Shiwan, <i>Ficus</i> species, <i>Pongamiapinnata</i>, Reetha, Rain tree, Pangara, <i>Peltoforum</i>, Palas, Saton, Mahagony, bamboo species etc. The Project Proponent also submitted that during plan period an area of 9.7288 ha (24,322 no. of plants) will be developed under 7.5m safety zone, Buffer towards habitation, archaeological site, & river and an area of 9.4435 ha (23,609 no. of plants) will be developed on backfilled area. A budget of Rs 28.83 Lakhs has been earmarked towards the same.
9	The Project Proponent needs to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022 or not. Accordingly, the Project Proponent shall submit the	The Project Proponent submitted that the authenticated list of Schedule I Species as per Indian Wildlife Protection Act 1972 as amended Gazette Notification of Wildlife (Protection) Amendment Act, 2022 has been obtained from the Dy. Conservator of Forests Wildlife & Eco-Tourism (North), Panji-Goa vide letter no. 1-576-WL&ET(N)/2023-2024/3312, dated 27.11.2023. According to this authenticated list, 29 Schedule I Species have been recorded within 10 km study area. As suggested by the Hon'ble EAC the company revised

	revised authenticated Schedule-I species.The Project Proponent also needs to submit the breakup of the conservation activities proposed under Wildlife Conservation Plan.	the break-up of conservation activities proposed under Wildlife Conservation Plan and same will be finalized after discussion with the Forest Dept. The break-up of the conservation activities proposed under Wildlife Conservation Plan are as follows:-						
		S.No	Particulars	1 st year	2 nd year	3 rd year	4 th year	5 th year
		1	Enrichment of forest areas with suitable indigenous species for wild life habitat improvement	12	12	12	12	12
		2	Creation/ maintenance of habitat for herbivores/ avian fauna					
		3	Management interventions for facilitating water availability to the wild life in forest areas/ Improvement of soil and water regime of forest areas					
		4	Financial support to the department for conducting awareness campaigns for various stakeholders					
		5	Financial support to the department for celebrating events like Wildlife week and sponsoring the prizes for the competitions					
			Total	Rs 60.0 Lakhs				
10	The Project Proponent needs to submit the map demarcating the surface features in the mine lease area and their safety distances left/maintained as per mines acts and rules.	The Project Proponent submitted the map demarcating the surface features in the mine lease area. The Project Proponent also submitted the safety distances left/maintained as per mines acts and rules as given below in table:						
		S.No	Features inside lease	Distance from Ultimate Pit Limit (UPL)		Statutory Distances as per MMR		
		1	ManasbagMulgao village	120 m		45 m		
		2	Mulgao village	58 m				
		3	Lamgao village	56 m				
		4	Manaswada Govt. School within habitation	138 m (12 Students)		45 m		
		5	Gaonkarwada Govt. School	190 m (not functional)				

			within habitation											
		6	Old Lairai Temple	126m (From 5 Bottom Backfilling site)										
		7	Mahadev&Sateri Temple	280 m										
		8	Kelbai Temple	205 m			45 m							
		9	Sateri Temple	130 m										
		10	Matrai Temple	150 m										
		11	Nimuzgah	210 m										
		12	Lamgao Caves	300 m										
							45 m							
11	The Project Proponent needs to provide proper treatment of channels and nallas flowing in the lease area for soil and water conservation. Scientifically designed and placed check dams and other engineering structures at different places can help control the erosion and loss of productive soil. Necessary study from competent institution/individuals may be done for this purpose.	The Project Proponent submitted that Silt load study was carried out through Center for Advance studies department of geology, University of Delhi and it was concluded that, all the structures made for the settling of sediments are found to be more than sufficient to accommodate sediments even during peak rainfall. The Project Proponent submitted that the a) Total length of the Garland drain = 11313 m b) Peak rainfall = 154 mm/day c) Peak runoff in a day = 110590 m3 d) Capacity of garland drain = 33939 m3. The garland drains are made such that from upstream to the downstream where the drains are meeting the settling ponds will show decrease in elevation, to maintain a free-flowing gradient of rainfall runoff. The dimension of the drains is maintained to be 2m in width and 1.5m in depth at everywhere in the mine site. A proper height has been maintained on the sides of the garland drain so that water don't get over-flooded from the drain.												
S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent												
1	The site visit report of the subcommittee.	The Project Proponent submitted the observations to the subcommittee recommendations during the site visit 29-31Oct., 2023 are complied and submitted in Parivesh portal.												
2	The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.	The Project Proponent submitted that 5 numbers of earlier mined out pits have been identified for backfilling purpose to accommodate waste to be generated in future besides additional pits to be made available progressively with mining till conceptual period. The physical details of available pits to be converted into backfilled areas are as follows: <table><tr><td>Mine pit</td><td>Total</td><td>Area</td><td>Depth</td><td>Top</td><td>Bot</td><td>Vol (m³)</td></tr></table>						Mine pit	Total	Area	Depth	Top	Bot	Vol (m³)
Mine pit	Total	Area	Depth	Top	Bot	Vol (m³)								

location/ ID	area of pit (ha)	Available for Backfilling (Ha)	(m)	RL (m)	RL (m)	
1 Top	22.4367	20.9942	99	62	-37	19356183
2 Top	13.0803	9.9465	60	60	0	2968920
3 Top	16.0596	13.1650	70	110	40	2240000
¾ Bottom	-	-	109	102	-7	-
5 Top	37.0242	35.7242	78	98	50	14213124
5 Top CB	-	-	77	124	47	-
5 Bottom	15.4196	12.0840	92	87	-5	7035240
Total	104.0204	91.9139				45813467

Further, the details of pits to be made available progressively with mining till conceptual period and converted into backfilled areas are as follows:

Mine pit location/ ID	Total area of pit (ha)	Area Available for Backfilling (Ha)	Depth (m)	Top RL (m)	Bot RL (m)	Vol (m ³)	Void availability for backfilling
2 Top	43.1944	39.2331	116	91	-25	10518996	5 th year
¾ Bottom	39.4606	34.6140	169	102	-67	15412643	End of 3 rd year
2 Top	68.52	65.6420	113	103	-10	47912000	6 th to 10 th year
3 Top/2 Top combined	38.2545	36.6500	118	108	-10	38161200	11 th to 13 th year
4 Top/3 Top Combined	-	-	84	73	-11	-	11 th to 13 th year
5 Top CB Pit	-	-	168	94	-74	-	11 th to 13 th year
Total	189.425	176.1391				112004839	

As shown in the above tables, five numbers of earlier worked out pits will have void volume of 45.81 million m³ and during the Plan & Conceptual period progressive excavation, 112 million m³ of void volume will be available for backfilling. Therefore, a total of 157.98 million M³ of void volume will be available for backfilling in mined out pits having a cumulative area of 268.05 Ha. Additionally, area of 62 Ha will be available as voids including 22 ha of water reservoir for storing rain water.

The Project Proponent also submitted that the Conceptual waste generation shall be 124.9 million Cum which will have a swelled volume of 149.90 million CuM (say 150 million CuM). The 0.2 million CuM of swelled waste will be dumped over top of backfilled pits as surface dumps. Sufficient space is available to accommodate waste generated during life of mine considering swell factor of

		1.2. Annual waste generation is in range of 4.35 to 12.58 million cum per year with an average of 9.61 million cum per year considering life of the mine as 13 years based on the presently available mineable reserves. Life of the mine may reach upto 30 years if entire resources are converted to reserves by removing all encumbrances.														
3	The Project Proponent needs to submit the design of settling ponds by considering the annual rainfall, catchment area and its discharge.	The Project Proponent submitted that at conceptual stage, total 12 no.s of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds. The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M3 of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M3. <table><tr><th>Particulars</th><th>Details</th></tr><tr><td>Catchment area of pits</td><td>160 ha</td></tr><tr><td>Rainfall received</td><td>160 ha x 3500 mm = 5.6 Million CuM</td></tr><tr><td>Effective surface runoff to be accumulated in voids</td><td>5.6 x 0.7 = 3.92 Million CuM</td></tr><tr><td>Pits water holding capacity</td><td>5.49 Million CuM</td></tr><tr><td>Gross settling ponds capacity</td><td>1.90 Million CuM</td></tr><tr><td>Total water holding capacity of mined pits and settling ponds</td><td>7.39 Million CuM</td></tr></table> Further, the Project Proponent submitted that since total water holding capacity in pits and settling ponds (7.39 Million CuM) is more than rainfall and surface runoff volume from catchment (3.92 Million CuM), there is sufficient space for effective surface runoff management in during extreme precipitation times. The dimensions of the drains to be maintained will be 2m in width and 1.5 m in	Particulars	Details	Catchment area of pits	160 ha	Rainfall received	160 ha x 3500 mm = 5.6 Million CuM	Effective surface runoff to be accumulated in voids	5.6 x 0.7 = 3.92 Million CuM	Pits water holding capacity	5.49 Million CuM	Gross settling ponds capacity	1.90 Million CuM	Total water holding capacity of mined pits and settling ponds	7.39 Million CuM
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Gross settling ponds capacity	1.90 Million CuM															
Total water holding capacity of mined pits and settling ponds	7.39 Million CuM															

		depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get over-flooded from the drains. The available garland drains are 11313 m in length and daily average surface run-off is estimated as 14003 m³. The garland drains have capacity to accommodate instant volume of 33939 m³ as per above dimensions. Therefore, garland drains capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. Therefore, water management structures comprising of drains, settling ponds and mined out pits are available as well as planned to address the catchment area run-off for conceptual period. The overflow discharge water will be regularly monitored so that quality of water is maintained as per the prescribed standards and always clear water from ponds / pits meet the natural system. In case required, water treatment would be done in the pits by using lime and flocculants or other organic chemicals.																											
4	The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road into concrete road.	The Project Proponent submitted the map showing the transportation route comprising of dedicated road corridor and public road. The total travel distance upto Jetty is 5.48 kms (4.54 km dedicated road and 0.94 km MDR-20 Public Road).Traffic load and effective distance between two trucks are as follows:- <table><tr><th>S.No</th><th>Transportation working days</th><th>Quantity (In TPA)</th><th>Tonnes/ Day</th><th>Trips per day</th><th>Mode of transport</th></tr><tr><td>1</td><td>237</td><td>30,00,000</td><td>12658</td><td>1205</td><td>Road</td></tr><tr><td colspan="4">Total Trips per day</td><td>1205</td><td></td></tr></table> The Road width details for various segments are as follows: <table><tr><th colspan="2">Dedicated Road corridor</th><th>Public Road</th></tr><tr><td>3.31 km</td><td>1.23 km</td><td>0.94 km</td></tr><tr><td>12-15 mts wide Road</td><td>7 mts wide Road</td><td>7 mts wide Road</td></tr></table> Further, the Project Proponent submitted the following details:- - Capacity of truck is 10.5 tons as per directives of Deptt. of Mines & Geology, Goa - Total Handling per day is 12658 tons /day - Transportation timings are 6.00 am to 7.00 am, 8:00 am to 12.45 pm and 2:00 pm to 5.45 pm. Therefore, the effective transportation time is 9.30 hrs.	S.No	Transportation working days	Quantity (In TPA)	Tonnes/ Day	Trips per day	Mode of transport	1	237	30,00,000	12658	1205	Road	Total Trips per day				1205		Dedicated Road corridor		Public Road	3.31 km	1.23 km	0.94 km	12-15 mts wide Road	7 mts wide Road	7 mts wide Road
S.No	Transportation working days	Quantity (In TPA)	Tonnes/ Day	Trips per day	Mode of transport																								
1	237	30,00,000	12658	1205	Road																								
Total Trips per day				1205																									
Dedicated Road corridor		Public Road																											
3.31 km	1.23 km	0.94 km																											
12-15 mts wide Road	7 mts wide Road	7 mts wide Road																											

	iv. Per Hour Handling is: 1332 tons/hour v. No. of Vehicles per Hour (One way): 127 vehicles vi. No. of Vehicles per Hour (to and fro): 254 vehicles vii. The Speed of vehicle is 25 KMPH and the lead distance is 5.48 kms viii. The time taken for 5.48 km is 13.15 mins for each truck and loading time is 1min, weighment time at both source location is 2 min, Tarpaulin tying and untying time is 2 min, unloading time 1 min and waiting time 10 min. ix. Each truck length is 15'. 5" (4.58 m) x. Distance from truck to truck is 5 m both side = 10 m xi. Each vehicle occupies a min. distance of 14.58 m = ~ 15 m xii. The length of road is 5.48 Km = 5480 m xiii. No. of vehicle which can travel on this road for one side= $5480 / 15 = 365$, However we would be plying only 127 trucks hence effective distance between two vehicles is 43 m. The Project Proponent submitted the following mitigation measures for transportation:- i. Public road is hot mixed and same will be maintained. ii. Dedicated road is proposed to be hot mixed in phased manner. iii. Entire Dedicated transportation route is surrounded by thick Green Belt iv. Transportation vehicles shall be properly maintained to minimize the exhaust emission. v. Regular tests shall be carried out to check exhaust emission and PUC certification of transportation vehicles at prescribed interval. vi. Transportation trucks will be loaded with prescribed capacity and covered with tarpaulin before leaving mines premises. vii. Overloading of the material will be avoided. viii. Regular monitoring of the emission levels. ix. Over speeding of Vehicle will not be allowed. x. Traffic Marshals shall be provided for regulating movement of vehicles as well as for safety of persons. xi. Training will be given to all drivers about safe driving. xii. Regular water sprinkling by means five hired water tanker of 10KL capacity on haul road and Loading

		points will be carried out xiii. Used of fixed dust suppression system on haul roads xiv. Installation of two wheel washed system (one each at the exit of the dedicated road and jetty exit respectively) xv. Manual and mechanised machines for road sweeping xvi. Washing of mine exit points/Junctions (Mayem, Pilgao and Jetty exit area) after transportation hours/at night with water tanker having pipe arrangements xvii. Underpass proposed at Mayem junction to prevent interface with public. The Project Proponent submitted that the regular mining in the state of Goa stopped since 2012 (it started for brief period in 2018 and again stopped). The truck owners who have already invested in the 10.5 T trucks are severely affected due to the stoppage of mining activity and are against procurement of new / high-capacity trucks, till their losses are covered. The company has already conducted series of meetings with the truck owner's associations for the higher capacity trucks and the truck owners are not agreeing to any changes in short term of 5 years. However, the engagement with the truck owners for higher capacity truck will continue. Company will also engage with all stake holders to explore the feasibility for installing conveyor belt system for transportation in near future, if permitted. The public road which is used for transportation is only 0.94 km long and the same is a hot mix road and in well maintained condition. The dedicated road of 4.54 km has very thick green belt on both the sides. There is no habitation along the dedicated road. Nearest habitation will be more then 250m from the road. The dedicated road before joining the public road is concreted and provided with the wheel wash system. Dedicated road sweeping machine will also be deployed to maintain the public road clean. The company also undertakes to hotmix the stretch of 4.54 km of dedicated road in a phased manner in three years' time frame. The estimated cost towards hot mixing is worked out as INR 18 crores.
5	Since the mine lease area is sharing the Mayem Forest	The Project Proponent submitted the letter from the Office of the Dy. Conservator of Forests, North Goa Division Sensitivity: Public (C4) vide letter no. 5/MINES-

	common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.	GEN/DCFN/TECH/2023-24/56, dated 12.04.2023 stating that the detail of village wise Survey No.s within Block-1 of Bicholim Mineral block was verified and found that the area under the above mentioned Survey Nos is not a Govt. Forest and also does not identified as Private Forest by State Level Expert Committee headed by Sawan/Dr. Karapurkar/V.T. Thomas.
6	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?	The Project Proponent submitted the letter from the Directorate of Mines & Geology vide Lr. No. 03/24/2023/Major/Mines/Part/489 dated 25.07.2023 stating that - M/s. Vedanta has been declared as Preferred Bidder for Bicholim Mineral Block- Block I through an auction process conducted by the Government of Goa as per the Mineral Auction Rules, 2015. - M/s. Vedanta Ltd., was not the erstwhile lessee of the said Block prior to auction. - The matter of illegal mining in the State of Goa is under investigation by the Special Investigation Team (SIT). The Project Proponent also submitted that the Block-I Bicholim Mineral Block was earlier operated by Sesa Mining Corporation Ltd. (SMCL) formerly known as Dempo Mining Corporation Ltd. Pursuant to Supreme Court Judgment in Goa Foundation order dated 07.02.2018, all the mining leases granted by the State Govt. were cancelled. Thereafter, State Govt. in terms of the said order and as per the provisions of MMDR Act put this block for auction as a fresh lease grant. The e-auction process was conducted in accordance with the Tender Document for said Mineral Block. Vedanta Limited emerged as the highest qualified bidder having submitted the highest final price offer and was declared as the preferred bidder under Rule 9(9) (iii) of auction Rules. Further, upon submission of the first Installment, being 20% of the upfront payment, Government of Goa issued a Letter of Intent (LOI) vide letter no. DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for the grant of a mining lease for Block-I Bicholim Mineral Block in Bicholim, Bordem, Lamgao, Mulgao, Mayem&Sirigao Villages, of Bicholim Taluka, North Goa District, Goa State over an area of 478.5206 Ha over a period of 50 years.
7	The Project Proponent needs to	The Project Proponent submitted that Goa State Pollution Control Board vide their letter No. 11/15/2023-PCB/

submit the video recording of the public hearing.	Leg/13555 dated 22/09/2023 submitted all the documents related to public hearing including public hearing video to the Member Secretary, EAC (Non Coal Mining).

iv. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
16.03.2023	F.No: IA-J-11015/3/2023-IA-II(NCM) IA/GA/MIN/422323/2023	3-4 May, 2023	Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgao, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa	16.06.2023

v. Details of Mine Lease:

- a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgao Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

vi. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

vii. Details of Mining Plan:

Review and Mining Plan approved by Indian Bureau of Mines, Goa	Letter No.	No. MCDR-MPC 1 2023-GOA-IBM_RO_GOA
	Date	26.05.2023
	Mine Lease Area	478.5206 Ha
	Mineral	Iron Ore (Major Mineral)
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining without Drilling & Blasting	
Drilling/Blasting	Not Applicable	
Total Reserves and Resources	84.73 Million Tonnes	
Proved Mineral Reserve	36.071 Million Tonnes	
Life of mine	30 years	
Bench Height	7 m	
Bench Width	10 m	
Individual bench slope	70 ⁰	
Overall pit slope	<26 ⁰	
RoM output size	Less than 500 mm	
Crushing/Screening	Mobile Dry Crushing and Screening plant shall be available within the proposed mine to handle 4 MTPA of crude ore. The primary crusher will consist of 1 no. of Jaw crusher of capacity 120 TPH with an input feed of -500mm and shall produce output of -70 mm. It shall be followed by secondary crushers, 2 no.s of capacity 300 TPH and 200 TPH respectively. The input feed size shall be -70mm and output feed size obtained shall be -40mm. The Screening Plants of capacity -600TPH shall be installed where input the feed size shall be -70mm to obtain product of -40mm lumps & -10mm fines.	
Transportation details	ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.58 km of which 0.94 km stretch is public road and remaining 4.64 km is company owned dedicated road.	
Dumpers capacity	40 tonne (within mines)	
Waste handling and Disposal	During the mining period, the waste generated by mining will be temporarily stacked within the mining lease area as surface dump and backfilled in the exhausted portion of the pits. The total waste to be generated during the plan period is about 69.85 million tonnes. An area of 6.7146 Ha shall be utilized for Dumps and Material stocking at the	

	conceptual stage of mining.

viii. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.		

ix. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North
Water Bodies	Asnora River	Touching lease boundary at one of the points
	Mayem Lake	0.46 km
	Mandovi River	2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Ilgah	Within the lease area
	Shri Lairae Temple	0.86 km
Caves/Fort	300m buffer from Lamgao caves Khorjuvem Fort: 2 km	

x. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	Yes	Mayem Forest Common Boundary with the mine lease area The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 km Kasarpal RF - 5.1 km Ambadgaon RF - 7.6 km
National park	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10

		km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. i. Madei Wild life Sanctury-14.105 km, E ii. Salim Ali Bird Sanctuary -10.553 km, SW iii. Bondla Wild life Sanctuary -20.476 km, SE
Schedule-I species	Yes	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: 5/FCA/GEN/F&F/DCFN/TECH/2022-23 dated 04.04.2023 with regard to list of Flora and Fauna species present in core and buffer zone. The following Schedule-I species are found in the study area such as 1 Common leopard (<i>Felidae</i>) 2 White-bellied Sea-Eagle(<i>Accipitridae</i>) 3 Indian Peafowl (<i>Phasianidae</i>) 4 Crimson rose- Butterfly (<i>Papilionidae</i>)
Status of Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023. PP has submitted the copy of the acknowledgement from Chief Wildlife Warden.

xi. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

xii. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	March, 2023 to May, 2023		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season		
Ambient Air Quality (no. of locations) and results	No. of Locations	Parameters	Results
	9	PM10	27.0 to 56.0 $\mu\text{g}/\text{m}^3$
		PM2.5	14.0 to 36.0 $\mu\text{g}/\text{m}^3$
		SO2	4.0 to 13.0 $\mu\text{g}/\text{m}^3$

		NO2	<4.0 to 18.0 µg/m ³
Noise level (no. of locations) and results	No. of Locations	Parameters	Results
	09	During Day Time [Leq dB(A)]	43.1 to 61.7
		During Night Time [Leq dB(A)]	35.9 to 49.3
Water Quality (no. of locations) and results	Surface water quality		
	No. of Locations	Parameters	Results
	07	pH	6.35 - 7.39
		TDS (mg/l)	72 - 11240
		Fluoride (mg/l)	<0.1
		Chloride (mg/l)	18 - 5620
		Fe (mg/l)	<0.05
		Dissolved Oxygen (as O ₂), mg/l	6.2 – 6.9
		Biochemical Oxygen Demand (as O ₂), mg/l	<3.0
		Chemical Oxygen Demand (COD) mg/l	22.0 – 26.0
	Groundwater Quality		
	No. of Locations	Parameters	Results
	10	pH	5.63 – 7.07
		TDS (mg/l)	20 – 150
		Fluoride (mg/l)	0.1
		Chloride (mg/l)	5.0 - 19.0
Soil Quality (no. of locations) and results	No. of Locations	Parameters	Results
	07	pH	5.38 to 5.78
		Electrical Conductivity (mohs/cm)	0.28 to 0.318
		Nitrogen (kg/ha)	200 to 275
		Phosphorus (kg/ha)	14.3 to 17.8
		Potassium (kg/ha)	230 to 263

xiii. Public Hearing (PH) Details:

Advertisement for PH with date	07.07.2023 Regional: Bhangar Bhui, Herald, Lokmat & Free press journal (Mumbai Edition) News papers

Date of PH	11/08/2023
Venue	Narayan Zantye Multipurpose Sports Complex, Sarvan, Bicholim, Goa
Chaired by	District Collector, North Goa
Main issues raised during PH	Pollution, impact on ponds, Support for Education, Health, Agriculture Development & Skill Development, Employment.
Budget proposed for addressing issues raised during PH	Rs 309.3 Lakhs

xiv. Rehabilitation & Resettlement:

R & R details	There is presence of habitation within ML Area at Mulgao and lamgao villages. Safety Buffer of 50m will be maintained from the habitations. No Rehabilitation & Resettlement Plan is proposed during life of mine.

xv. Court case details:

Court Case	Yes
Additional information (if any)	First Case: 1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extent it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order the matter has been disposed of by the HC on 17th July 2023 with a direction to the Petitioner to make a representation before the Government and the Government is to dispose of the same within four months. Second Case: 1. WP 592 of 2022 The said writ petition seeks to challenge the constitutionality of the tender

	documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to the extend it fails to include the essential facts and in the alternative to stay the auction. 2. Case status is pending 3. No adverse orders have been passed. 4. As per the last order the matter is listed on 01.09.2023.

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will comply to the directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking of Project Proponent	The Project Proponent has submitted an undertaking stating that the Environmental Impact Assessment Report of Block-1 Bicholim Mineral Block of M/s Vedanta Ltd was prepared by M/s Mineral Engineering Services, QCI/NABET Accredited EIA Consultant at Sr.No. 55 as per list of list of accredited consultant/organizations. The Project Proponent has submitted an undertaking that the information and data provided in the EIA report and submitted to the Ministry are factually correct and they are fully accountable for the same.
Consultant submitted an Undertaking vide letter dated 02.06.2023	This is to declare that the prescribed ToRs have been complied with and that the data submitted are factually correct in respect of EIA & EMP report prepared for Block-1 Bicholim Mineral Block of M/s Vedanta Ltd, Goa.

xvii. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Plantation	-	7.5
Environment monitoring	44	44
Air pollution control measures	20	300
Water Treatment	-	11
Erosion control /monsoon measures	-	221
Personal protective equipment	-	15
Maintenance of fire protection systems	-	1.5
Environment awareness & training	-	5
Health	8	16
Total	72	621

xviii. Details of project cost and employment:

Particulars	(Rs. In lakhs)
Project Cost	25000 Lakhs
Employment	716 no.s

3. Observation and Recommendation of the EAC:

The Project Proponent presented the KML file to indicate the site features in the vicinity of the mine lease area. Then, the EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project Proponent/EIA Consultant informed the EAC that plan for backfilling has been revised. About 5 numbers of earlier mined out pits have been identified for backfilling purpose to accommodate waste to be generated in future besides additional pits to be made available progressively with mining till conceptual period. The existing and conceptual availability of voids for backfilling is 157.98 (say 158) million CuM. Conceptual waste generation shall be 124.9 million Cum which will have a swelled volume of 147.43 million CuM. The void area and the capacity available are more than sufficient to meet the backfilling requirement. The Project Proponent also presented the year wise production from the working pits and waste disposal locations. Further, the Project Proponent presented the Progressive Mine Closure Plan showing working pit, backfilling, drainages and settling ponds at the end of plan period.

The Project Proponent informed the EAC that a total of 0.38 million cu.m of void volume is available for holding surface run-off in 12 nos of settling ponds having a cumulative area of 8.84 ha. The EAC asked about the highest rainfall in the past. The Project Proponent informed the EAC that the highest rainfall was 3900mm in the last 10 years. The Project Proponent also informed the EAC that total water holding capacity in pits and settling ponds (7.39 Million Cu.M) is more than rainfall and surface runoff

volume from catchment (3.92 Million Cu.M) and hence there is sufficient space for effective surface runoff management in during extreme precipitation times. It is also proposed to strengthen the existing settling ponds embankments by stone pitching, cement pointing, addition of filter beds etc., The total travel distance upto Jetty is 5.48 km comprising of 4.54 km dedicated road and 0.94 km MDR-20 Public Road. Transportation working days will be 237 days. Trips per day will be 1205 and the capacity of the truck is 10.5 Tonne (T). It is proposed to have a dedicated road in place of 0.94 km stretch of public road within 2.5 years. It is also proposed to replace existing trucks of 10.5 t with higher capacity trucks of 25 t in phased manner to reduce traffic load and emissions per tonne/km. The EAC suggested the Project Proponent to speed up the process of construction of underpass. The Project Proponent presented a letter obtained from the Office of the Deputy Conservator of Forests letter dated 12.04.2023 stating that village wise Survey nos within Block-1 of Bicholim Mineral Block is not a Govt. Forest land and also does not identified as Private Forest land by State Level Expert Committee headed by Sawan/Dr. Karapurkar/V.T. Thomas. The Project Proponent also informed the EAC that Goa State Pollution Control Board vide their letter dated 22/09/2023 submitted all the documents related to public hearing including public hearing video to the Member Secretary, EAC (Non Coal Mining).

Then, the Project Proponent presented the point wise compliance of the recommendations of the subcommittee. The Project Proponent informed the EAC that preliminary techno-economic feasibility study has been undertaken for capacity of 3.0 MTPA from dry mineral processing plant to Sarmanas jetty covering a length of 5.72 km. Width of OLBC corridor is 17 m including service road. The proposed alignment for Over Land Belt Conveyor (OLBC) will be along the current transportation route. At prima facie it does not look feasible to switchover to OLBC system considering the terrain of the likely route having mounds and low-lying areas, vegetation/forest patches and its likely degradation, accessibility, environmental impacts and safety issues, technologies available, cost of the system, implementation period vis-a-vis remaining reserves in the mining lease. Further, the Project Proponent also submitted that they will engage with all stake holders to explore the feasibility for installing conveyor belt system for transportation in near future. At conceptual stage, area of 20 ha will be converted into water reservoir & an area of 293.5 ha will be converted into backfilled area and will be reclaimed & rehabilitated by the plantation. The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc. Pisciculture in mine pits will be developed and also to involve the community for cage fishing to make it a commercially viable venture. It is proposed to develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc. A garden will be developed near the Idgah within the mining block area and proper road will be provided for access of visitors and pilgrims. The Project Proponent also presented the eco restoration model developed in other mines.

The Project Proponent informed the EAC that garland drain capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take care of peak run off during the plan period. A proper height will be maintained on the sides of the garland drain so that water does not get over-flooded from the drains. Permanent water sprinklers with 3.40 km length along the haul road within the mine lease area and 2.80 km length outside the mine lease area on either side of the road will be installed. Crushing & screening units will be modified within 4 months after obtaining the Clearances. It is proposed to develop nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village). Around 1100 sq.m of area will be utilized for the nursery. The Project Proponent informed the EAC that the authenticated list of Schedule I Species as per Indian Wildlife Protection Act 1972 as amended Gazette Notification of Wildlife (Protection) Amendment Act, 2022 has been obtained from the Dy. Conservator of Forests Wildlife & Eco-Tourism (North), Panji-Goa vide letter dated 27.11.2023 and according to this authenticated list, 29 Schedule I Species have been recorded within 10 km study area. The conservation activities proposed under Wildlife Conservation Plan has been revised with a budget of Rs 60.0 Lakhs and same will be finalized after discussion with the Forest Dept. A silt load study was carried out through Center for Advance studies, Department of Geology, University of Delhi and it was concluded that, all the structures made for the settling of sediments are found to be more than sufficient to accommodate sediments even during peak rainfall.

The Project Proponent informed the EAC that a letter was obtained from the Directorate of Mines & Geology vide letter dated 25.07.2023 stating that matter of illegal mining in the State of Goa is under investigation by the Special Investigation Team (SIT). The EAC asked the Project Proponent to submit the undertaking regarding illegal mining. The Project Proponent submitted an undertaking vide email dated 26.12.2023 stating that M/s Vedanta limited is the preferred bidder for the Bicholim Mineral Block-Block 1 declared by the Govt. of Goa and it is also to undertake that there is no illegal mining done by M/s Vedanta Ltd. The EAC opined that the instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022(MSPL v. State of Goa & Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors) regarding challenging the state's decision to go ahead with the auction of the mining block.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC in its meeting held during 26-28 December, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance (EC) to Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed

production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. The instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022 (MSPL v. State of Goa & Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors) regarding challenging the state's decision to go ahead with the auction of the mining block.
- ii. The Hon'ble Supreme Court has imposed a capping on mining of iron ore to 20 MTPA for the entire State of Goa. Accordingly, the Project Proponent shall first obtain the necessary permission from the competent authority with regard to the amount of mineral they can mine per year, before starting its mining operation.
- iii. As committed before the EAC, the Project Proponent needs to explore the feasibility for installing conveyor belt system for transportation.
- iv. The Project Proponent needs to obtain prior permission from the MoEF&CC for mining in common boundary as and when required.
- v. The ecology restoration or mine reclamation activities shall be carried out concurrently with mining operations. The Project Proponent shall ensure that the restoration models demonstrated before the EAC shall be developed in association with research institutes like NEERI, Goa University etc.
- vi. The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc., Pisciculture in mine pits will be developed and also the local community will be involved for cage fishing to make it a commercially viable venture.
- vii. The waste dump slopes shall be covered with laterite material and then with biodegradable geotextile mats to prevent the soil erosion of the dump slopes so as to facilitate the growth of native species.

- viii. Regular monitoring and analysis of discharge water and at upstream and downstream of Bicholim and Asnora river needs to be carried out quarterly through NABL/MoEF&CC accredited laboratory.
- ix. Extensive native fruit bearing plantation shall be carried out in all safety zones with density of 2500 trees/ha.
- x. The Project Proponent needs to install the permanent water sprinklers along 3.40 km haul road within the ML area and 2.80 km length outside the ML area on either side of the road.
- xi. As committed by the Project Proponent, existing trucks of 10.5 Tonnes shall be replaced with higher capacity trucks of 25 Tonnes in phased manner to reduce traffic load and emissions per tonne/km.
- xii. Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC. Regular sprinkling shall be done on roads to suppress the dust at the source.
- xiii. The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
- xiv. The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine.
- xv. The Project Proponent needs to speed up the process of construction of underpass.
- xvi. The Project Proponent needs to strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge.
- xvii. The catch drains and siltation ponds needs to be regularly maintained to arrest silt and sediments flow from dumps.
- xviii. The Project Proponent needs to modify the crushing & screening units within 4 months from the date of issue of this EC.

- xix. The Project Proponent needs to develop a nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village) for an area of about 1100 sq.m in consultation with State Forest Department. PP shall develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc.,
- xx. The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
- xxi. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
- xxii. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
- xxiii. The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- xxiv. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
- xxv. The budget of Rs 309.3 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xxvi. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

- xxvii. The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.
- xxviii. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 72 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
- xxix. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
- xxx. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xxxi. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

- xxxii. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.
- xxxiii. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
- xxxiv. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.

1.4 Guruvanipalli Limestone Mine of M/s. UltraTech Cement Limited for expansion in Limestone Production from 0.30 Million TPA to 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha, located at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District Kurnool, Andhra Pradesh – [F.No: :IA-J-11015/56/2021-IA-II(NCM), Proposal No: IA/AP/MIN/453165/2023;EIA Consultant: M/s J.M. EnviroNet Pvt. Ltd] – Environmental Clearance (Expansion)

The instant proposal is for mining of Limestone in Guruvanipalli Limestone Mine of M/s. UltraTech Cement Limited for expansion in Limestone Production from 0.30 Million TPA to 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha, located at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District Kurnool, Andhra Pradesh.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at Central level.

- ii. The mine lease area is located between Latitude: 15°03'19.99661" N to 15°05'36.79473" N and Longitude: 78°00'16.63709" E to 78°01'55.11414" E. The mine lease area falls under the Survey of India Toposheet No: D43F16, D43L13, D44A4 and 57 J/1 and falls in Seismic Zone – II.
- iii. Details of previous Environmental Clearance (EC):
- a) The Project Proponent submitted that initially Environmental Clearance was obtained vide Lr No J-11015/212/2008-IA.II(M) dated 01.07.2009 for a production of 0.30 MTPA in the mine lease area of 395.15ha in favour of M/s. UltraTech Cement Limited.
- iv. Details of Terms of Reference:
- a) The Project Proponent obtained Terms of Reference (ToR) vide ToRLr. No IA-J-11015/56/2021-IA.II(NCM) dated 23.12.2022 for Guruvanipalli Limestone Mine for expansion in Limestone Production capacity from 0.30 Million TPA to 4.0 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha.
- v. Details of Mine lease:

S.no	Lol/Lease order	Grant	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Initial Grant of Mining lease in favour of M/s DakshinCement Limited vide G.O. Ms. No.149, Inds. & Com (M.III) Dept.,		30.09.1995	Limestone	02.01.1997 – 01.01.2017 (20 years)	Govt., of Andhra Pradesh	395.15
2	Transfer of Mining lease held by M/s DakshinCement Limited to M/s. UltraTech Cement Limited vide G.O. Ms.No.80, Inds. & Com (M-I) Dept.,		16.04.2012	Limestone	for the unexpired portion of the mining lease period i.e., upto 01.01.2017	Govt., of Andhra Pradesh	395.15
3	Extension of validity of mine lease vide G.O. Ms. No. 38		12.02.2019	Limestone	For the period upto 01.01.2047	Govt., of Andhra Pradesh	395.15

- vi. Details of executed Mine leases:

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	02.01.1997	01.01.2017	Proceedings No. 5634/M4/95 dated 02.01.1997 in favour of M/s DakshinCement Limited
2	Transfer of mining lease deed	11.07.2012	01.01.2017	Affidavit bearing AK 772376 in favour of M/s. UltraTech Cement Limited
3	Supplementary lease deed	15.03.2019	01.01.2047	Affidavit bearing CH 337737

vii. Land Use/Land Cover of the Mine Lease Area:

Private land	230.02 ha
Government land	165.13 ha
Total Mining lease area (MLA)	395.15 ha
Private land for crusher, workshop & other infrastructure outside the mine lease area	No infrastructure is proposed outside the mine lease area

viii. Mining plan details:

Modified Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	AP/KNL/MP/LST-22/HYD
	Date	04.02.2021
	Mineral & (Major/Minor)	Limestone, (Major)
	Mine Lease Area, Ha	395.15
	Validity	2021-22 to 2025-26
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling: Drilling will be carried out using 150 mm dia drills. Blasting: The burden & spacing is 4 x 6 m, 5 x 8 m or more depending on the strata and the holes will be drilled upto 9 m depth with sub grade drilling of 1 m. Delay detonators/ shock tube detonators with ANFO, slurry, SME explosives, will be used to achieve better fragmentation and less throw of material.	
Geological Reserves	170.79 million Tonnes	
Mineable Reserves	108.81 million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral)	Total Excavation: 4.31 million TPA <u>Breakup of Total Excavation:</u>	

Rejects/ Waste, MTPA)	1. Limestone: 4.0 Million TPA 2. Soil: 0.31 Million TPA
Life of mine	~31 years
Mine Bench Height & Bench Width	Bench height: 9 m Working Bench Width: 20-25 m (Working)
No. of Mine Benches	4 in current plan period & 6 at conceptual stage
plan period m bgl	312 m AMSL (37 m bgl)
Ultimate Depth of Mining, m bgl	294 m AMSL (55 m bgl)
Ground Water Table, m bgl	Pre-monsoon - 14.7 to 21.2 m bgl Post-monsoon - 12.5 to 19 m bgl
Details of ground water intersection	Water table will be intersected during the working and necessary permission will be taken before intersecting ground water table.
Individual bench slope	85°
Overall pit slope	45°
Details of existing/ proposed Crusher	An existing crusher is located in the adjacent mine lease, at about 2.0 KM distance from the current working pit and this crusher is being utilized for crushing of limestone. After exhausting the mineral reserves at the southern side of the mining lease area (near to the crusher), a crusher will be established at this mining lease for crushing the remaining limestone reserves
Mineral Beneficiation	Nil
RoM output size	50 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The transport of blasted material is being/will be done by dumpers (55 & 100 T) from mine faces to crusher located at a distance of 1.80 km in adjoining Tummalapenta Limestone mine and after crushing, the crushed limestone is being dispatched to the cement plant located about 3.1 km away from crusher, through the covered conveyor belt. Subsequently after exhaust of mineral reserves on southern side of the mining lease (near to the existing crusher), a crusher will be established at this mining lease for crushing the remaining limestone reserves and transported to cement plant through covered belt conveyor.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ During Plan period, 0.34 million tonnes of Top soil will be generated which will be used for greenbelt and plantation ➤ During conceptual period 1.34 million Tonnes of top soil will be generated which will be used for greenbelt and plantation. <u>Over Burden:</u>

	➤ No OB generation is there in this mining project
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-
Additional information (if any)	There are some old slab quarries existing within the mining lease area. A Letter has been obtained from Department of Mines and Geology, Andhra Pradesh, vide letter no. 744/M4/1998 dated 09.07.2018 regarding the existence of old slab quarries in part of the mine lease area. The limestone is not uniform in quality across the deposit. Some areas are high in lime content and some are low. For mineral conservation and optimum utilization of the reserves, it is proposed to operate multiple pits simultaneously and also to meet the necessary ROM quality of the cement plant.

ix. Water requirement:

Total water requirement	300 KLD	Domestic	10 KLD
		Dust Suppression/Greenbelt	290 KLD
Source	Sourced from Cement plant and sump of existing Tummalapenta mine & later from this instant mine sump as and when developed.		
Permission for withdrawal/ intersection along with details of grant and its validity	Govt. of Andhra Pradesh, O/o The Commissioner, Panchayat Raj & Rural Development & Administrator, Apwalta accorded permission vide Lr.No. CORD-11028/6/2018- SLNA-GIS-CORD, dated 11/12/2021 to draw 2900 KLD of Rain water collected in the Mine pit and 500 KLD of groundwater from the existing bore wells of Thummalapenta village, Kolimigundla Mandal, Kurnool district and also 600 KLD of groundwater from the existing bore wells of Bhogasamudram Village, Tadipatri Mandal, Ananthapuramu District.		

x. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Guruvanipalli	Adjacent to the ML Area in East direction
Nearest Town	Tadipatri	16.0 km in SSW direction
Nearest State/National Highway	SH - 30	5.5 km in South direction
	SH - 57	4.0 km in SE direction
Interstate Boundary	-	
Railway Station/Railway line	Tadipatri	16.5 km in SSW direction

Water Bodies	Seasonal nallah passing through the lease area	-
	PeddaVanka (intermittent stream)	2.5 km in NE direction
	PeddaVanka (intermittent stream)	6.5 km in WSW direction
	SaddalaVengannaCheruvu (lake)	7.0 km in East Direction
Forest	Nil	-

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent submitted the letter from the Govt. of Andhra Pradesh, Forest Department vide Lr. Rc.No. 21052/1/2023/WL-2, dated 01.11.2023 stating that i. No Reserve Forest and Protected Forest etc., within 10 km radius of the study area. ii. No National Park, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridor, Tiger/Elephant Reserves etc., within 10 km radius of study area. iii. The nearest protected area is Rajiv Gandhi National Park at a distance of 66.59 km and GundlaBrahmeswra WLS is about 70.11 km from the proposed mine area.
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No. s and name of schedule-I species with authenticated letter)	Yes	The Project Proponent submitted the letter from the Govt. of Andhra Pradesh, Forest Department vide Lr. Rc.No. 21052/1/2023/WL-2, dated 01.11.2023 stating that following Schedule-I animals are found in the impact zone of 10 km radius from the proposed boundary such as Bengal fox, Jackal, Jungle Cat, Small Indian Mongoose, Indian crested porcupine, Bonnet macaque, Indian Chameleon, Indian Cobra and Rat Snake. Further, the Project Proponent submitted that
Wildlife Conservation Plan	Yes	

		the Wildlife Conservation Plan for Schedule-I fauna with financial outlay of Rs 85.0 Lakhs was approved by the Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden vide letter dated 01.11.2023.

xii. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	74.98 ha
Budget for green plant & plantation till the end of life of mine.	62 lakhs (yearly 2 lakhs)
Budget for nursery	No Provision for Nursery
Details of existing plantation and its survival rate	<i>Pongamiapinnata</i> (Kanuga), <i>Azadirachta indica</i> (Neem), <i>Samaneasaman</i> (Rain tree), <i>Cassia fistula</i> (SemaThangedi), <i>Delonix regia</i> (Gulmohar Tree). Survival Rate is 92%
No. of tree cuts in the mine lease area and compensatory afforestation	None
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & Non mineralized areas	14.30 Ha
50 m safety zone of nallah, roads, electric lines	35.50 Ha
500 m safety zones of nearest habitation villages (Exhausted Pit Boundaries & Non Mineralized areas)	25.18 Ha

xiii. Baseline Data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March to May, 2021
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season
Predominant Wind direction (From)	West
Ambient Air Quality (no. of locations) and results	9 Locations Result summary: PM ₁₀ : 51.8µg/m ³ - 88.9µg/m ³ PM _{2.5} : 26.9µg/m ³ - 51.3µg/m ³ SO ₂ : 6.4µg/m ³ - 12.3µg/m ³ NO ₂ : 13.2µg/m ³ -28.7µg/m ³
Noise level (no. of locations) and results	9 Locations Day Time (Lday) noise level: 50.6 dB (A) – 59.8 dB (A) Night Time (Lnight) noise level: 41.8 dB (A) – 50.9 dB (A).

Water Quality (no. of locations) and results	Parameters	Surface water (2 locations)	Ground water (8 locations)
	pH	6.92 – 7.26	7.04 – 7.55
	Total Dissolved Solids, mg/l	381 - 549	494 - 651
	Chloride as Cl-, mg/l	109.9 – 144.9	74.9 – 139.9
	Total Hardness, mg/l	209.6 – 292.3	267.3 – 405.9
	DO, mg/l	6.5 – 6.9	-
	BOD, mg/l	4.9 – 7.1	-
	COD, mg/l	20 - 26	-
Soil Quality (no. of locations) and results: 8 Locations	Parameters		Observed Values
	pH		7.47 – 7.92
	Electrical Conductivity (mS/cm)		0.25 – 0.58
	SAR Value		0.38 – 0.63
	Available Nitrogen, kg/ha		171.09 - 190.72
	Available Potassium, kg/ha		168.45 - 559.27
	Available Phosphorus, kg/ha		26.47 – 37.89
Hydro geological study and results	The Project Proponent submitted the hydrogeological report and rainwater harvesting plan for Guruvanipalli Limestone mine. The Project Proponent submitted also that the total groundwater recharge within the mine site will be the sum of recharge through pit and recharge through rainwater harvesting structure is 1,58,000 cu.m/annum. At present the groundwater intersection has not occurred, but during plan period water table will be intersected due to mining activities. Prior permission will be taken before intersection of ground water table.		
Traffic study (no. of locations) and results	The Project Proponent submitted that the blasted material is being/will be transported by dumpers from mine faces to crusher (located in adjacent mine) via haul road and after crushing finally the limestone is being/will be dispatched to the clinkerization unit located about 3.1 km away from this mine through conveyor belt. No public road will be used for transportation of limestone. Hence, traffic study is not required.		

xiv. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	Indian Express on 02.06.2023 and Sakshi on 02.06.2023
Date of PH	04.07.2023 at 11:00 AM
Venue	Mining Lease Area of Guruvanipalle Limestone Mine 395.15 Ha
Chaired by	▪ Shri B. Pullaiah (District Revenue officer, Nandyal District, Nominated by District Collector) ▪ Shri B Y Muni Prasad (Environment Engineer, Andhra Pradesh Pollution Control Board, Regional Office, Kurnool)
Main issues raised during PH	Drinking water facilities, Medical camp, Community hall, Employment, Environment and Development, Cattle grazing, R&R, Greenbelt development works, Pollution etc.,
Budget proposed for addressing issues raised during PH over 3 years	Capital Cost: 307.5 Lakhs Recurring Cost: 35.70 Lakhs

xv. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity		
Consent to Establish	Consent Order for Establishment was granted by the Andhra Pradesh Pollution Control Board vide Order No. 193/PCB/CFE/RO-KNL/HO/2011 dated 22.06.2012 for production capacity of 0.3 MTPA in an area of 33.50 ha in the mine lease area of 395.15 ha.		
Consent to Operate	Renewal of CFO was granted by the Andhra Pradesh Pollution Control Boardvide order dated 23.11.2022 for 0.3 million TPA (Valid: 31.01.2024)under Water Act (1974) and Air Act (1981).		
Certified Compliance Report and Inspection date	Certified Compliance Report was issued by Sub-Office at Vijaywada, MoEF&CC vide File No. IRO/VIJ/EPA/EC-A/101/06-38/2022 dated 13.07.2023.Site visit was carried out by Sub-Office on 27.04.2023.		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Department of Mines and Geology, Govt. of Andhra Pradesh vide Lr. No: 744/M4/1998 dated 04.08.2023 issued the production and dispatch details since inception to 30 th June, 2023.		
	S. No	Year	Production and

		Dispatch (in MT)
1	1997-98 to 2013 to 2014	0
2	2014-15	1000
3	2015-16	0
4	2016-17	1000
5	2017-18	30000
6	2018-19	39882
7	2019-20	41000
8	2020-21	44882
9	2021-22	111882
10	2022-23	296882
11	2023-24 (up to 30 th June, 2023)	64386

xvi. Rehabilitation & Resettlement:

R & R details	The Project Proponent submitted that total mining lease area is 395.15 ha out of which 230.02 ha is a private agricultural land and 165.13 ha is government land. Out of total private land of 230.02 ha, 104.77 ha land has been purchased by UTCL and remaining 125.25 ha of lands need to be purchased. There are 83 houses present within mine lease area, hence there will be need of displacement due to the mining activities. There are 279 families out of which 139 PAFs whose land 125.25 ha. is yet to be purchased and 140 PAFs whose land 104.77 ha. have already been acquired. A budget of Rs 28.683 Cr have been earmarked towards R&R.

xvii. Court case details:

Court Case, No and its present status	The Project Proponent submitted an undertaking vide letter dated 12.12.2023 stating that there is no litigation pending against the project and order passed by any Court of Law against the project under the Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xviii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: CM 524112 dated 19.04.2021 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in w.r.t. Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.

Undertaking by Project Proponent in EIA/EMP report	The Project Proponent submitted an undertaking vide letter dated 22.11.2023 stating that they have reviewed the EIA report and take full responsibility and ownership of the contents presented in the EIA report by J.M. EnviroNet Pvt. Ltd and instructions as per MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4 th August, 2009 has been followed in the preparation of this EIA Report.
Undertaking by Consultant in EIA/EMP report	The Consultant submitted an undertaking vide letter dated 24.04.2023 to the effect that the conditions laid down in Terms of Reference issued by MoEF&CC, New Delhi vide letter no. J11015/56/2021-IA.II(NCM) dated 23.12.2022 have been complied as per data/details provided by Project Proponent & as per Mining Plan along with Progressive Mine Closure Plan approved by IBM and the data submitted are factually correct.
Plagiarism Certificate	The Head of the Accredited Consultant Organization/ Authorized person certified that this EIA Report has been evaluated by using online software viz. Plagiarism Checker X on 20.11.2023. The report produced has been analyzed by the system and based on it and certify that the EIA Report produce in accordance with good scientific practice.

xix. Details of the Environment Management Plan (EMP):

Sl. No.	Activities	Proposed Cost (In Lakhs)	
		Capital	Recurring
A.	Mitigative Measures		
1	water tanker for water sprinkling in other roads and mining areas/activities.	24.43	5.14
2	Fixed Water Sprinkler on Haul Road	50	10
3	Green belt and plantation on 62.90 ha (10.42 ha on 7.5 m lease periphery + 25.18 ha on bench plantation + 27.30 ha on safety zone of nala, road and habitation)	394	2.62
4	Drip irrigation facility for plantation	5.0	0.5
5	Protection for Plantation (Fencing around area)	20	0.30
6	Garland Drain around Low line of mining pit	0.20	0.56
7	10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine lease area.	30.0	2.0
	Sub Total	523.63	21.12
B.	Monitoring		

1	Installation of continuous Ambient Air Quality Monitoring Station (3 nos)	150	15
2	Display Board at main gate for display of Ambient, Air, Noise and Hazardous waste monitoring data.	5.00	0.50
3	Six Ambient Air Quality Monitoring Station at Village Guruvanipalle, Ankireddipalle, Petnikota	5.00	0.50
4	Providing Ear muffs/plus to workers working in high noise area	2.37	0.00
5	Air monitoring Equipment for PM10 & PM2.5	1.70	1.50
6	Work Place Noise Level Monitoring (4 no. of locations & quarterly frequency)	-	0.10
7	Installation of 03 piezo-meter along the periphery in the premises	5.00	0.50
8	Occupational Health Check-up of Mines Employees	10.00	0.00
	Sub total	169.07	18.1
C.	Wildlife conservation plan	85.00	0.00
	Total	777.70	39.22

xx. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of public hearing)	Capital Cost: Rs. 7.78 Crores/- Recurring Cost: Rs. 40 Lakh/ annum
Project Cost	Rs. 48 Crores
Employment	71 persons

3. Observation and Recommendation of the EAC:

The Project Proponent/EIA Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area. The Project Proponent showed the boundary of the mine lease area and the cement plant. The Project Proponent also indicated the location of the existing crusher located in the adjacent Tummalapenta Limestone mine. After exhaust of mineral reserves on southern side of the mine lease (near to the existing crusher), a crusher will be established at this instant mine lease for crushing the remaining limestone reserves and will be transported to cement plant through covered belt conveyor. In the 2nd phase, crusher will be installed in the northern part of the mine lease area and the same will be transported through covered belt conveyor and there will be no issue of crossing the public road and the roads will not be disturbed. The Project Proponent informed the EAC that during initial period of 5 years of mining operation existing haul roads will be used and no public road will be used for mineral transportation purpose. A nallah passes through the southern part of the mine lease area and will not be disturbed. The EAC asked about the old workings visible in the eastern and western side of the mine lease area. The Project Proponent informed the EAC that there are some old slab quarries. The EAC asked the Project Proponent to

take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself.

The EAC asked the Project Proponent that when will the peak production will be achieved. The Project Proponent informed the EAC that peak production of 4.0 MTPA will be achieved in the 5th year i.e., 2025-26. No National Park, Wildlife Sanctuary, Reserve and Protected forest located within 10km radius of the study area. The nearest protected area is Rajiv Gandhi National Park at a distance of 66.59 km and Gundla Brahmeswra WLS is about 70.11 km from the proposed mine area. The mine lease area falls under Kurnool District only. There will be no waste generation from this mine. Baseline data was carried out during March-May 2022 (Summer Season). Predominant wind direction is from west. Environment Impact Assessment was carried out for normative production capacity of 13333 TPD and peak production capacity of 15333 TPD to assess the pollution. The resultant concentration of PM₁₀ will be 67.27 µg/m³ and PM_{2.5} will be 36.55 µg/m³. The no. of working days will be 305 @ 3 Shifts of 8 working hours. At the end of life of mine, an area of 155.32 ha will be excavated, 163.23 ha will remain undisturbed and an area of 74.98 will be brought under greenbelt/plantation. The excavated area will be converted into water reservoir.

The Project Proponent showed the photographs of the greenbelt and plantation developed within the mine lease area. The Project Proponent informed the EAC that the public hearing was conducted on 04.07.2023. A budget of Rs 307.5 Lakhs has been earmarked as a Capital cost and Rs 35.70 Lakhs as a recurring cost towards to address the concerns of the public hearing with a timeline of three years. The proposed cost for Environment Management Plan (EMP) is Rs 7.78 Crores. The EAC asked the Project Proponent to show the existing and proposed list of machineries. The Project Proponent presented the existing and proposed list of machineries required for expansion. The EAC observed that the production is suddenly increasing from 1.0 MTPA in 4th year to 4.0 MTPA in the 5th year. The Project Proponent informed the EAC that at present mine is operating in a single shift and later the mine will be operated in three shifts to achieve the proposed production capacity. The EAC asked the Project Proponent to ensure that the machinery requirement/capacity to match with the proposed expansion production capacity. The Project Proponent presented the certified past production details and certified compliance report dated 13.07.2023. Site visit was carried out by Sub-Office on 27.04.2023. Sub-Office of MoEF&CC has certified that no non-compliances were detected.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC in its meeting held during 26-28 December, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance (EC) to M/s. UltraTech Cement Limited for mining of Limestone in Guruvanipalli Limestone Mine for expansion in

Limestone Production from 0.30 Million TPA to 4.00 Million TPA, Soil: 0.31 Million TPA (Total Excavation: 4.31 Million TPA) in the mine lease area of 395.15 Ha, located at Village Guruvanipalli (Revenue Village: Petnikota), Taluka- Kolimigundla, District Kurnool, Andhra Pradesh subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. The Project Proponent needs to ensure that the machinery requirement/capacity shall match with the proposed expansion production capacity so as to avoid the sudden increase in pollution load.
- ii. No Nallah should be disturbed or diverted at any stage of the mining operation.
- iii. No public road shall be used for mineral transportation purpose.
- iv. The Project Proponent needs to carry out ground vibration study through reputed institute to determine maximum charge per hole and charge to be blasted per delay so that ground vibrations are minimized and kept within permissible safe limits fixed by DGMS.
- v. The mined out pits shall be used as Water reservoir/Pisciculture. Fencing should be made to prevent any inadvertent entry of men and cattle.
- vi. The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- vii. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
- viii. The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
- ix. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.

- x. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
- xi. The Project Proponent needs to take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself. The dense plantation shall be carried out in the vicinity of the crusher. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.
- xii. The Project Proponent needs to make provision for permanent water sprinklers instead of water tankers. About, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. The Project Proponent needs to put effort to reduce water consumption by 30%.
- xiii. The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.
- xiv. The budget of Rs 307.5 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xv. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by

MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

- xvi. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 7.78 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
- xvii. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
- xviii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xix. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- xx. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.
- xxi. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on

occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.

- xxii. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
- xxiii. The Project Proponent shall seek permission from Ministry before installing any crusher in the mine lease area.
- xxiv. The Project Proponent shall periodically maintain the garland drains, retaining wall and other water management structures in the mine lease area.

1.5 Hutti Gold Mines (ML No: 2671) of M/s The Hutti Gold Mines Company Limited for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka - [File No: J11015/13/2003-IA.II(M), Proposal No: IA/KA/MIN/436624/2023; EIA Consultant: M/s Ecomen Laboratories Pvt Ltd] - Terms of Reference (Expansion)

The instant proposal is for Terms of Reference of M/s The Hutti Gold Mines Company Limited for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2(b) Mineral Beneficiation and falls under Category "A" as the mine lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 16°12'29.55813"N to 16°11'57.54790"N and Longitude: 76°39'38.73430" E to 76°39'42.06560"E. The mine lease area falls under the Survey of India Toposheet No: 56 D/12.
- iii. The proposal was earlier considered in the 19th EAC (Non-Coal Mining) meeting held during 24-25 August, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information

on 29.11.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its EAC meeting held during 24-25 August, 2023 and compliance of observation of EAC made by Project Proponent are detailed below:

S. N o	Observation of EAC in its meeting held during 24-25 August, 2023	Reply by Project Proponent																		
1	The Project Proponent needs to submit the details of the chronology of the two mine leases and their amalgamation into single lease with supporting documents clearly mentioning the mine lease area also to clarify whether any amendment in EC has been obtained after renewal as a single mine lease during the year 2008.	The Project Proponent submitted that initially mining lease was granted under the mining lease no. 1564 for mining of gold and associated minerals over an area of 528.35 Ha (1305.6 Acres) for a period of 30 years from 20.12.1978 to 19.12.2008. Then, the second mining lease was granted under the mining lease no. 1734 for mining of Scheelite Mineral over an area of 528.35 Ha (1305.6 Acres) for the period coterminous with the original lease i.e., up to 19.12.2008. Further, the Project Proponent submitted that the ML no. 1564 and ML no. 1734 for mining of Gold and associated minerals and Scheelite Mineral respectively, renewed under the Mining Lease no. 2671 for mining of Gold, Scheelite and associated minerals. There was no amalgamation of mining lease of M L no. 1564 and M L no. 1734. The Project Proponent also submitted the letter issued by the Govt. of Karnataka vide Lr No. CI 113 CMC 2016 Bengaluru, dated 14.02.2019 stating that as per the provision of Section 8A (8) of MMDR Act, 1957 read with Rule 3(1) of the Mineral (Mining by Government Company) Rules, 2015, the period of mining lease bearing no: 2671 held by M/s Hutti Gold Mines Company Limited shall extended up to 19.12.2028.																		
2	The Project Proponent needs to submit the certified past production details from the inception of the mining operation to 2011-12.	The Project Proponent submitted the letter from the Office of the Director, Dept. of Mines and Geology, vide Lr.No DMG/DCBML-2671/2023-24/6799 Bengaluru-1, dated 25.09.2023 from the period 1948-49 to 2022-23. <table><tr><th rowspan="2">Year</th><th colspan="3">Ore production</th><th rowspan="2">Ore processing Tonnage (Million Tonnes)</th></tr><tr><th>Tonnage (Million Tonnes)</th><th>Recovery grade (g/t)</th><th>Gold produced (Tons)</th></tr><tr><td>1948-49</td><td>0.0039</td><td>19.01</td><td>0.074</td><td>0.0039</td></tr><tr><td>1949-50</td><td>0.0265</td><td>7.60</td><td>0.202</td><td>0.0265</td></tr></table>	Year	Ore production			Ore processing Tonnage (Million Tonnes)	Tonnage (Million Tonnes)	Recovery grade (g/t)	Gold produced (Tons)	1948-49	0.0039	19.01	0.074	0.0039	1949-50	0.0265	7.60	0.202	0.0265
Year	Ore production			Ore processing Tonnage (Million Tonnes)																
	Tonnage (Million Tonnes)	Recovery grade (g/t)	Gold produced (Tons)																	
1948-49	0.0039	19.01	0.074	0.0039																
1949-50	0.0265	7.60	0.202	0.0265																

		1950-51	0.0289	8.81	0.255	0.0289
		1951-52	0.0350	8.02	0.281	0.0350
		1952-53	0.0424	7.58	0.321	0.0424
		1953-54	0.0620	8.49	0.527	0.0620
		1954-55	0.0751	7.24	0.544	0.0751
		1955-56	0.0756	7.45	0.563	0.0756
		1956-57	0.0760	6.47	0.491	0.0760
		1957-58	0.0776	5.68	0.440	0.0776
		1958-59	0.0802	5.78	0.464	0.0802
		1959-60	0.0954	5.22	0.498	0.0954
		1960-61	0.1045	6.28	0.656	0.1045
		1961-62	0.1105	7.07	0.781	0.1105
		1962-63	0.1095	8.22	0.900	0.1095
		1963-64	0.0531	8.04	0.427	0.0531
		1964-65	0.0959	8.02	0.768	0.0959
		1965-66	0.0804	9.76	0.785	0.0804
		1966-67	0.1068	8.62	0.921	0.1068
		1967-68	0.1086	8.48	0.921	0.1086
		1968-69	0.1065	9.13	0.972	0.1065
		1969-70	0.1258	7.25	0.912	0.1258
		1970-71	0.1758	7.59	1.334	0.1758
		1971-72	0.2041	6.29	1.283	0.2041
		1972-73	0.2134	6.23	1.328	0.2134
		1973-74	0.2157	6.60	1.423	0.2157
		1974-75	0.1866	6.84	1.276	0.1866
		1975-76	0.1789	6.54	1.170	0.1789
		1976-77	0.1401	6.28	0.880	0.1401
		1977-78	0.1090	7.84	0.855	0.1090
		1978-79	0.1191	6.65	0.792	0.1191
		1979-80	0.1100	7.65	0.842	0.1100
		1980-81	0.1479	5.24	0.774	0.1479
		1981-82	0.1451	6.57	0.954	0.1451
		1982-83	0.1422	5.26	0.749	0.1422
		1983-84	0.1462	5.58	0.816	0.1462
		1984-85	0.1364	6.32	0.862	0.1364
		1985-86	0.1510	5.54	0.837	0.1510
		1986-87	0.1558	5.88	0.916	0.1558
		1987-88	0.1631	5.37	0.876	0.1631
		1988-89	0.1828	5.29	0.968	0.1828
		1989-90	0.1599	5.38	0.861	0.1599
		1990-91	0.1965	5.25	1.032	0.1965
		1991-92	0.2012	5.34	1.075	0.2012
		1992-93	0.1809	4.86	0.880	0.1809
		1993-94	0.1775	5.42	0.962	0.1775
		1994-95	0.2338	5.21	1.218	0.2338
		1995-96	0.1873	5.07	0.949	0.1873
		1996-97	0.1864	6.59	1.228	0.1864
		1997-98	0.1667	7.28	1.213	0.1667
		1998-99	0.1583	7.25	1.147	0.1583
		1999-2000	0.1298	7.94	1.030	0.1298
		2000-01	0.1331	10.82	1.440	0.1331
		2001-02	0.3220	6.77	2.181	0.3220

		2002-03	0.3993	5.99	2.390	0.3993
		2003-04	0.4823	6.01	2.900	0.4823
		2004-05	0.4808	6.71	3.227	0.4808
		2005-06	0.4542	5.89	2.673	0.4542
		2006-07	0.4855	4.60	2.232	0.4855
		2007-08	0.5015	4.57	2.307	0.5015
		2008-09	0.5047	3.96	1.975	0.5047
		2009-10	0.4989	4.09	2.030	0.4989
		2010-11	0.4964	4.46	2.006	0.4964
		2011-12	0.4498	2.87	1.396	0.4498
		2012-13	0.4865	2.95	1.435	0.4865
		2013-14	0.4867	2.75	1.293	0.4867
		2014-15	0.4695	2.37	1.245	0.4695
		2015-16	0.5246	2.74	1.473	0.5246
		2017-18	0.5089	2.98	1.514	0.5089
		2018-19	0.5374	2.91	1.563	0.5374
		2019-20	0.5403	2.77	1.499	0.5403
		2020-21	0.3803	2.47	0.940	0.3803
		2021-22	0.4197	2.88	1.209	0.4197
		2022-23	0.5395	2.35	1.270	0.5395
3	The Project Proponent needs to submit the copies of the Consent to Operate (CTO) from its inception.	The Project Proponent submitted the copies of Consent to Operate as given below in table:				
		S. No	Documents	File no.	Validity	
		1	Consent to Establish (CTO)	624/KSPCB/R0900004/APC/2000-01/1246	01/07/2000 to 30/06/2001	
		2	Consent to Establish (CTO)	311/KSPCB/TC/WPC/DEO-3/2001/651	21/09/2001 to 30/06/2002	
		3	Consent to Establish (CTO)	KSPCB/SEO-2/SC&M/DEO AEO3/2002-03/77	09/07/2002 to 30/06/2003	
		4	Consent to Establish (CTO)	KSPCB/APC/IND2/CKM/DEO-TC/AEO-2/2002-03/780	28/10/2002 to 30/06/2003	
		5	Consent to Operate (CTO)	KSPCB/APC/RCR/DEO-TC/2003-04/335	01/07/2003 to 30/06/2004	
		6	Consent to Operate (CTO)	KSPCB/WPC/RCR/2003-04/343	01/07/2003 to 30/06/2004	
		7	Consent to Operate (CTO)	KSPCB/WPC/SEO-2/SC&M/DEO/AEO/2004-05/342	20/12/2004 to 30/06/2005	
		8	Consent to Operate (CTO)	KSPCB/WPC/SEO-3/DEO-TC/AEO-3/2005-06/65	29/06/2005 to 30/06/2006	
		9	Consent to Operate (CTO)	KSPCB/SEO-4/EO/DEO-3/06-07/149	01/07/2006 to 30/06/2007	
		10	Consent to Operate	KSPCB/APC/SEO-4/EO/DEO/AEO/07-08/211	01/07/2007 to	

		(CTO)		30/06/2008
	11	Consent to Operate (CTO)	KSPCB/SEO/DEO/AEO/08-09/539	01/03/2008 to 30/06/2009
	12	Consent to Operate (CTO)	KSPCB/SEO/Mining/AEO/09-10/725	01/07/2009 to 30/06/2010
	13	Consent to Operate (CTO)	25/KSPCB/SEO/DEO/AEO/2011-12/95	01/07/2010 to 30/06/2011
	14	Consent to Operate (CTO)	271/PCB/MIN/CFO/2012-13/1383	21/12/2012 to 30/06/2013
	15	Consent to Operate (CTO)	313/PCB/MIN/CFO/2013-14/1410	18/11/2013 to 30/06/2014
	16	Consent to Operate (CTO)	321/PCB/MIN/CFO/2004-15/1651	01/07/2014 to 30/06/2015
	17	Consent to Operate (CTO)	416/PCB/ MIN/CFO/2015-16/1506	01/07/2015 to 30/06/2016
	18	Consent to Operate (CTO)	AWH-30621 PCB ID 28496	11/05/2016 to 30/06/2020
	19	Consent to Operate (CTO)	AW-333881 PCB ID 28496	03/09/2020 to 31/03/2023
	20	Addendum to Consent Order	PCB/MIN/ADDENDUM/2023-24/1276	01/04/2023 to 31/03/2025

iv. Details of previous Environmental Clearance (EC):

- a) Initially, the Project Proponent obtained Environmental Clearance (EC) vide EC Lr.No: J-11015/13/2003.IA.II(M) dated 17.11.2004 for Hutti Underground Gold mine of M/s Hutti Gold Mines Company Ltd., for expansion in production of Gold ore from 0.351 MTPA to 0.6 MTPA over an area of 308.35 ha under the EIA Notification, 1994.

v. Details of Mine Lease:

- a) The Project Proponent has submitted that initially mining lease deed was executed on 20.12.1978.
- b) The original grant notification was issued vide Notification No. CI 128 MMN 2011, dated 26.03.2012.
- c) The Project Proponent submitted the copy of the mine lease deed made on 22.03.2014 for a period of 20 years w.e.f. 19.12.2008.
- d) The Project Proponent submitted the letter issued by the Govt. of Karnataka vide Lr No. CI 113 CMC 2016 Bengaluru, dated 14.02.2019 stating that as per the provision of Section 8A (8) of MMDR Act, 1957 read with Rule 3(1) of the Mineral

(Mining by Government Company) Rules, 2015, the period of mining lease bearing no: 2671 held by M/s Hutti Gold Mines Company Limited shall extended up to 19.12.2028.

- vi. The Project Proponent has submitted that the entire mine lease area of 528.35 ha is a Govt. land.
- vii. Details of Mining Plan:
 - a) The Project Proponent has submitted that the Modification of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide Lr.No: 279/356/92/BNG/803 dated 09.04.2018 for mining of Gold over an area of 528.35 ha for the period 2018-19 to 2022-23.
 - b) The method of mining will be mechanized underground mining method.
 - c) The mined out ore will be transported to the processing plant by trucks and conveyor belt. The gold ore will be treated in processing plant by various stages to recover the final product gold.
 - d) The oxide ore will be mined first and will be extracted by adopting Grinding, Gravity Concentration, Thickening & Leaching-Carbon-In-Pulp-Elution & Electro Winning-Cyanide Detoxification-Refining.
 - e) The mill tailings will be disposed of separately in a designated tailing dump within the mine lease area. The tailings will be disposed by pumping in slurry form.
 - f) The generation of waste rock estimated as around 4,37,414 Tonnes during the period 2020-21 to 2022-23, out of which 49% will be used as road metal, building construction jobs and remaining 51% as filling materials in completely depleted stopes. There is no sub grade ore or mineral produced.
 - g) Disposal methods being practiced includes coarse material in stope filling in underground and fine material is stored in upstream embankment method in tailings dam. About 1400-1500 tonnes per day, tailings estimated to dispose to the dump and 300-400 tons per day coarse sand estimated to be used for stope filling.
- viii. The Project Proponent has submitted that the source of supply of water is from Krishna river (20 km from mine), Dump recycling water and mined out water. About 25.88% of water is recycling. About 4600 KLD of water from Krishna river is being used every day. For the expansion proposals, the required quantity of water for additional manpower, ore processing works out to be 1320 KLD and will be met from Krishna river and recycled water.
- ix. The Project Proponent has submitted that there is no forest land within the mine lease area and Reserve Forests are located more than 5km from the mine lease area. The Project Proponent also submitted that there is no National Park, Wildlife Sanctuary, Eco Sensitive Area, Western Ghats within 10 km radius of the

mine lease area. Further, the Project Proponent has submitted that Hutti Nadi (Seasonal Odai), Odai (Seasonal nala) are found within the mine lease area and Canal near medinapur and Hire halla are located at a distance of 0.77 km, W and 1.81 km, WNW respectively from the mine lease area. Hutti village is located within the mine lease area.

- x. The Project Proponent has submitted that an area of 66.08 ha has been developed under greenbelt. The proposed area for the development of greenbelt will be 108.27 ha and no. of saplings proposed to plant is 1,51,578 no.s with a budget of Rs 1500 Lakhs.
- xi. The Project Proponent vide letter dated 24.04.2023 submitted an undertaking stating that the proposed expansion proposal is not a violation as per provision S.O 804 (E) dated 14.03.2017 and SOP dated 07.07.2021.
- xii. The Project Proponent has submitted that since it is an underground mine, the question of reclamation and rehabilitation does not arise and no R&R is involved in this project.
- xiii. The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
- xiv. The Project Proponent has submitted that the total cost of the proposed expansion project is Rs 10,000 Lakhs. The existing manpower is 3892 persons and the proposed manpower for the expansion will be 1000 persons.

3. Observation and Recommendation of the EAC:

The EAC deliberated on the additional details submitted by the Project Proponent and the EIA Consultant. The Project Proponent informed the EAC that initially mining lease was granted under the mining lease no. 1564 for mining of gold and associated minerals over an area of 528.35 Ha (1305.6 Acres) for a period of 30 years from 20.12.1978 to 19.12.2008. Then, the second mining lease was granted under the mining lease no. 1734 for mining of Scheelite Mineral over an area of 528.35 Ha (1305.6 Acres) and the lease deed was executed on 17.03.1981 for the period coterminous with the original lease i.e., up to 19.12.2008. Further, the Project Proponent submitted that the ML no. 1564 and ML no. 1734 for mining of Gold and associated minerals and Scheelite Mineral respectively, renewed under the Mining Lease no. 2671 for mining of Gold, Scheelite and associated minerals on 26.03.2012 and it was effective from 19.12.2008. There was no amalgamation of mining lease of M L no. 1564 and M L no.1734. Further, the Project Proponent presented the certified past production details from the period 1948-49 to 2022-23. The Project Proponent also presented the details of the Consent to Operate (CTO) from its inception and the last CTO was obtained on 01.04.2023 which is valid upto 31.03.2025.

The EAC observed that the Project Proponent obtained Environmental Clearance on 17.11.2004 under EIA, 1994 and after that the Project Proponent did not obtain amendment in EC for inclusion of Gold, Scheelite and associated minerals. The EAC noted that as per Ministry's Notification dated 04.04.2011, *prior environmental clearance is as well required at the stage of renewal of mine lease for which application should be made up to one year prior to date of renewal*. The EAC also reiterated the judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Versus Union of India and Ors *"the renewal of a mining lease after 27th January, 1994 will require an EC even if there is no expansion or modernization activity or any increase in the pollution load"*. The EAC noted that the Project Proponent obtained the renewal of mining lease on 26.03.2012 and at this stage Project Proponent required to obtain EC as per Ministry's Notification dated 04.04.2011. However, project proponent has not obtained the EC at the time of renewal of mine lease. Further, the EAC noted the Project Proponent did not submit the proposal under Ministry's Notification dated 06.04.2018 and 14.03.2017. Thus, the EAC opined that the instant proposal attracts the judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors and violation of the EIA Notification, 2006. The EAC also observed that the Project Proponent submitted the proposal for expansion in production capacity from 0.6 MTPA to 0.9 MTPA (2000 TPD to 3000 TPD) and enhancement of processing plant capacity of 0.9 MTPA – 1.2 MTPA (3000 TPD to 4000 TPD) in the mine lease area of 528.35 ha. The EAC reiterated the Ministry's SOP notification dated 7th July, 2021, SOP for dealing with the violation cases:

Step 1: Closure or Revision:

S. No	Status of EC	Actions
1	If no prior EC has been taken	Order to close its operation
2	If prior EC is available for existing/old unit	Order to revert the activity/ production to permissible limits
3	If prior EC was not required for earlier production level but is now required	Restrict the activity/production to the extent to which prior EC was not required

Step 2: Action under Environment (Protection) Act, 1986:

Action under section 15 read with section 19 of the Environment (Protection) Act, 1986 shall be initiated against the violators.

The EAC was of the view that the Project Proponent needs to revert the activity/ production to permissible limits. The EAC asked the Ministry to take action against the Project Proponent under the provisions of the Environment (Protection) Act, 1986. Based on the discussions held, the EAC in its meeting held during 26-28

December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021 for identification and handling of Violation cases under EIA 2006 to M/s The Hutti Gold Mines Company Limited for production capacity of 0.6 MTPA and processing plant capacity of 0.9 MTPA in the mine lease area of 528.35 ha, located at Hutti Village, Lingsugur Taluk, Raichur District, Karnataka for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The Ministry has to initiate action under section 15 read with section 19 of the Environment (Protection) Act, 1986 against the project proponent. Further, no consent to operate to be issued till the project is granted EC. The action initiated by the State Govt./State PCB, status of the same may be submitted to the Ministry.
- ii. The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- v. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants. vi. Details of benefit accrued during the violation period along with capital cost of the project needs to be submitted.

- vi. The Project Proponent needs to submit the penalty provisions as per Ministry's SOP dated 07.07.2021 at the time of appraisal of EC.
- vii. The Project proponent needs to comply with all the statutory requirements of the order of Hon'ble Supreme Court dated 2nd August 2017 in w.r.t. Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
- viii. The Project Proponent needs to submit the ecology restoration plan.
- ix. The Project Proponent needs to submit the efficacy and operational data of the EMP measures undertaken in the past.
- x. The Project Proponent needs to carry out the rapid study on need-based assessment for undertaking community development activities in nearby villages and conducting to achieve specific SDGs with the help of the local community. Based on the study/report, the Project Proponent shall prepare long-term sustainable development programs for their holistic development.
- xi. The Project Proponent needs to submit the comparison of data on the standards of the living of the local people after obtaining EC under EIA, 1994 and as on date. PP also needs to highlight the influence on the developmental activities that changed the standard of living of the local people.
- xii. The Project Proponent needs to submit the management plan for handling and management of tailings.
- xiii. The Project Proponent needs to submit the treatment methods for mine water discharge and waste water containing heavy metals.
- xiv. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- xv. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.

- xvi. The Project Proponent needs to submit the action plan for carrying out plantation along the 7.5m barrier, safety zone and gap plantation. PP should also submit the details of no of saplings planted and to be planted, type of saplings existing and proposed, existing survival rate and the area covered and to be covered under greenbelt/plantation along with the timeline and budget. The Project proponent also needs to submit the successful rate in compliance to the earlier EC.
- xvii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities. The Project Proponent also needs to submit the implementation status of the earlier public hearing concerns.
- xviii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xix. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xx. The Project Proponent shall prepare the scheme for mandatory recycle/reuse of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xxi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I(M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xxii. The Project Proponent needs to submit the latest Certified Compliance Report (CCR) by the Ministry's Regional Office at the time of appraisal of EC.

- xxiii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

Day 2: 27th December, 2023 (Wednesday)

2.1 Proposed Dongargaon Limestone Mine of M/s RCCPL Private Limited with total excavation of 1.52 Million TPA (ROM- Limestone – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA) over an area of 252.36 ha, located at Village (s) - Dongargaon, Dahigaon and Wegaon, Tehsil – Wani&Maregaon, District Yavatmal, Maharashtra – [F.No: J-11015/33/2022-IA-II(NCM), Proposal No: IA/MH/MIN/451465/2023; EIA Consultant: M/s Enkay Enviro Services Private Limited] – Environmental Clearance (EC)

The instant proposal is for mining of Dongargaon Limestone Mine of M/s RCCPL Private Limited with total excavation of 1.52 Million TPA (Limestone: 0.9 Million TPA (ROM), OB – 0.56 Million TPA & Soil – 0.06 Million TPA) over an area of 252.36 ha, located at Village (s) – Dongargaon, Dahigaon and Wegaon, Tehsil – Wani&Maregaon, District Yavatmal, Maharashtra.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 20°2’24.76”N to 20°3’43.16”N and Longitude: 78°50’22.24”E to 78°51’44.12”E. The mine lease area falls under the Survey of India Toposheet No: 55L/16 and falls in Seismic Zone – II.
- iii. Details of Terms of Reference:
 - a) The Project Proponent obtained Terms of Reference vide ToRLr. No: IA-J-11015/33/2022-IA-II(NCM) dated 03.10.2022 for mining of Limestone in Dongargaon Limestone Mine of M/s RCCPL Private Limited with Total Excavation of 1.52 Million TPA [Limestone (ROM) – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA] in the mine lease area of 252.36 Ha for undertaking detailed EIA/EMP study.

iv. Details of Mine Lease:

S. No	Lease Particulars	Date of Grant	Mineral	Mine Lease Area, Ha	Period	Granted by

1	Letter of Intent for grant of mining lease in pursuant to Rule 10 (2) of the Mineral (Auction) Rules, 2015 and this Letter of Intent is valid for a period of 3 years from the date of its issuance	20.05.2022	Limestone	252.36	50 years	Govt. of Maharashtra

v. Land Use/Land Cover of the Mine lease area:

Private Agriculture land	252.36 Ha
Government land	Nil
Total Mine lease area (MLA)	252.36 Ha

vi. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	YTL/LST/MPLN-02/2022-NGP
	Date	12.08.2022
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	252.36
Mining Parameters	Quantitative Description	
Method of Mining	Open cast Mechanized	
Drilling/Blasting	115 mm dia and 5 m (+10% subgrade drilling) will be drilled with compressed-air-operated DTH drills. The blasting will be done by ANFO/SME/Slurry as column charge and slurry /cast booster explosive as booster charge. Controlled blasting will be practiced by using Nonel detonators.	
Geological Reserves	12.95 Million Tonnes	
Mineable Reserves	5.36 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Total Excavation-1.52 Million TPA Mineral (Limestone)-0.9 Million TPA OB-0.56 Million TPA Soil-0.06 Million TPA	
Life of mine	8 Years	
Mine Bench Height & Bench Width	Bench Height- 5.0 m & Width-15.0 m	

No. of Mine Benches	Max. 12		
Existing Depth, m bgl	Nil		
Ultimate Depth of Mining, m bgl	49 m bgl		
Ground Water Table, m bgl	Post Monsoon-25 m bgl & Pre-Monsoon-29 m bgl		
Details of ground water intersection	Ground water table will be intersected during Post Monsoon period of 4 th year.		
Individual bench slope	80 ⁰		
Overall pit slope	35 ⁰		
Details of existing/ proposed Crusher	Not Any		
Mineral Beneficiation	Not Any		
RoM output size	400 mm		
Transportation details including capacity of dumper/tipper, mode of transport and distance	Production TPD	Average - 3000 Tonne (Limestone)	
	Dumper Capacity	25/30 Tonne	
	Mode of Transport	By Road	
	Distance	55 km	
	No. of Dumper Required per Day	34 No. of dumper	
Generation of Topsoil/OB & its Management during plan period & conceptual period	Particular	Plan Period	Conceptual
	Soil	0.16 Million Tonne	0.19 Million Tonne
	Management	Will be Stored at Soil dump and use for plantation	
	Over burden	1.89 Million Tonne	2.26 Million Tonne
	Management	Will be Stored at waste dump	Shall be utilized for backfilling
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Not Any		

vii. Water requirement:

Total water requirement	115.0 KLD		Domestic	4.0 KLD
	Fresh	105.6 KLD	Dust Suppression	80.0 KLD
	Treated	9.4 KLD	Plantation	23.0 KLD
			Workshop	8.0 KLD
Source	Ground Water & Mine Pit Water			
Permission	No Objection Certificate (NOC) for Groundwater abstraction was obtained vide letter no. CGWA/NOC/MIN/ORIG/2023/18998, dated 11.08.2023 for abstraction of fresh water of 115 m ³ /day for the period up to 10.08.2025.			

viii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name		Distance & Directions	
Nearest Village	Dongargaon		0.40 km, N (From lease boundary) 0.59 km, N (From mine working pit)	
Nearest Town	Wani		8.60 km, E	
Nearest Highway	NH-930		4.0 km, N	
Nearest Railway station	Wani		10.4 km, ENE	
Water bodies	S. No	Particulars	Distance (Km)	Direction
	1.	NirgudaNala adjoining lease boundary	0.86 (from Nearest working pit in N)	N
	2.	NirgudaNala passing through lease boundary	0.170 (from Nearest working pit in S)	S
	3.	GhanmodNala	3.53	NE
Forest	S. No.	Particulars	Distance (Km) (From Lease Boundary)	Direction
	Reserve Forest (RF)			
	1.	Borgaon	3.49	SE
	2.	Ghonsa	4.83	SSW
	3.	MaregaonRamna	4.86	N
	4.	Maregaon	5.41	N
	5.	Margaon	6.37	N
	6.	Suknegaon	6.66	SSE
	7.	Manki	7.04	SE
	8.	Pendhari	8.61	WSW
	9.	Petur	8.67	SE
	10.	Bhivkund	8.77	SW
	11.	Phiski	9.90	N
	Protected Forest (PF)			
	12.	PF N/V Dongargaon	0.72	NE
	13.	PF N/V Borda	2.94	S
	14.	PF N/V Kegaon	3.33	WSW
	15.	PF N/V Gothani	5.06	SW
	16.	PF N/V Surla	8.85	SW
	17.	Lakhapur PF	9.71	NNE

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	No	The Project Proponent submitted the letter from the Office of the Conservator of Forest (Territorial), Yavatmal, Forest Circle dated 23.12.2022 stating that

		no forest land involved in the mining lease area of 252.36 ha.
National Park	No	The Project Proponent submitted the letter from the Office of the Principal Chief Conservator of Forest (HoFF) vide letter dated 19.06.2023 stating that there is no Sanctuary, National Park or Tiger Corridor observed within 10 km area from the mining area. The Tipeshwar Sanctuary is 38 Km away from this mining area. Hence, there is no need to take wildlife clearance for this proposal. The Project Proponent also submitted the map certified by Principal Chief Conservator of Forest (Wildlife).
Wildlife Sanctuary	No	
Elephant/Tiger Reserve		
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	The Project Proponent submitted the authenticated list of flora and fauna vide LrNo. DESK - 23 (2) / WL / SURVEY / PRAKRA30 / 785 / 2023-24, dated 19.06.2023. Core Zone - Large Bengal Monitor Lizard Buffer Zone - Tiger, Sloth Bear, Indian Pangolin, Indian Peafowl.
Wildlife Conservation Plan	Yes	The Project Proponent submitted that the Wildlife Conservation plan for Five Schedule-I species was prepared and submitted to DCF, Pandhakawda, as well as PCCF (WL) Maharashtra on the basis of present study Field Observations, Working Plan and as per the recommendation of the Forest department – Yavatmal (Maharashtra). WLCP has been forwarded by CCF Amravati, on 08.11.2023 to APCCF (WL) East, Nagpur, Maharashtra.

x. Green belt/plantation details:

Proposed area for green belt/plantation	38.94 ha
Budget for green plant& plantation till the end of life of mine.	Rs. 1.01 Cr.
Budget for nursery	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
Along Road, Near Soil & OB Stack	14.16 ha
Dumps Area	6.84 ha
Backfilled area	12.80 ha
Two uppermost benches	5.14 ha
Total no. of saplings proposed to plant	39,210 No.s

xi. Baseline data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	October, November & December - 2022
Season (Summer / Pre-monsoon / Post-	Post Monsoon Season

monsoon / Winter)			
Predominant Wind direction (From)		North	
Ambient Air Quality (no. of locations) and results		8 No. of Locations of Ambient Air Quality Monitoring	
	Particular	Results	Standard
	PM10	38.5 to 56.7 $\mu\text{g}/\text{m}^3$	100 $\mu\text{g}/\text{m}^3$
	PM 2.5	16.3 to 37.6 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
	SO2	7.9 to 24.6 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$
	NO2	12.2 to 30.8 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$
Noise level (no. of locations) and results		8 No. of Locations of Noise Monitoring	
		Day Time	44.6 to 49.8 Leq dB (A)
		Night Time	40.1 to 42.4 Leq dB (A)
Water Quality (no. of locations) and results		8 No. of Locations of Ground Water Quality Monitoring	
		pH	7.4 to 7.9
		Total Hardness	162 to 199 mg/l
		Alkalinity	148 to 176 mg/l
		TDS	228 to 384 mg/l
		3 No. of Locations of Surface Water Quality monitoring:-	
		pH	7.4-7.9
		BOD	2.2-2.4 mg/l
		COD	11.8-13.6 mg/l
		DO	3.2-3.8 mg/l
Soil Quality (no. of locations) and results		8 No. of Locations of Soil Quality Monitoring	
		pH	6.74 to 7.85
		Type of Soil	Silty Clay
		Nitrogen	87.2 to 279.3 mg/kg
		Phosphorus	16.8 to 60.7 mg/kg
		Potassium	124.4 to 302.8 mg/kg
Hydro geological study and results		The Project Proponent submitted that detailed hydrological study was conducted as per the guidelines issued by Central Ground Water Authority. As per the study the water table in area is about 29 m bgl (Pre-Monsoon) & 25 m bgl (Post-Monsoon). As per approved mining plan at the end of 4th year working the pit bottom will be 190 MSL (27 m bgl). Thus, the mine will intersect the ground water table during Post-Monsoon period of 4 th year. Permission for Ground water abstraction	

	was obtained vide letter no. CGWA/NOC/MIN/ORIG/2023/18998, dated 11.08.2023. Permission for de-watering will be taken when required. There will be no considerable impact on ground water quality due to mining activity. However norms of CGWA regulations will be complied.
Traffic study (no. of locations) and results	• The Project Proponent submitted that traffic survey was conducted at three station TS-1 (T bend of Wegaon To Kumbharkhani Mine Road To Dongargaon), TS-2 (SH 233 T Bend To Wegaon Road (Near WCL Kumbharkhani Mine)) & TS-3 (SH 233 T Bend Wani - Mukutban Road). • As per traffic survey, the existing Volume in PUV/Hr at TS stations is 32, 95 & 235 respectively and existing Capacity of Road in PUC/Hr is 625 and LOS Value for existing traffic Scenario come under A (excellent at TS-1 & TS-2) and B (Very Good at TS-3). • After the operation of proposed mining only 30 PUC per/hr will increase. Hence, the carrying capacity of the road is accommodable for the proposed project.

xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	1. Hitavada – 15.06.2023 2. "Lokmat" – 15.06.2023
Date of PH	17.07.2023
Venue	At Project site of Dongargaon Limestone Mining Project, Village-Dongargaon, Tehsil-Wani, District-Yavatmal.
Chaired by	Mr. Amol Yedge, IAS, District Magistrate Yavatmal, Chairman of Environment Public Hearing committee; SouHema Deshpande, Regional officer, Maharashtra Pollution Control Board Chandrapur as Member and Mr. Umashankar Bhadule, Sub Regional Officer, Maharashtra Pollution Control Board Chandrapur as convener.
Main issues raised during PH	Environment, Employment, Education and skill

	development training for youth, Plantation Programme, Land Compensation, CSR, Transportation, Water Level/Borewell Status / Surface Water.
Budget proposed for addressing issues raised during PH over 3 years	Rs.60 Lakhs (For Three years)

xiii. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that R&R Plan/compensation details for the Project Affected Family's / Project Affected People has been prepared and as per the Detailed Report prepared the total land required for the lease period (08 years) is 82.21 Hectares. The land purchase cost based on the best (maximum) of LARR Act, 2013 and Maharashtra State Policy & Annual Statement of Rates which is Rs. 13,42,94,000. However, land shall be purchased based on mutual agreement and consent of land owners. The land rates shall be in conformity to or higher than State Policy. Land purchase shall start after obtaining environmental clearance and mining lease grant order.

xiv. Court case details:

Court Case	Project Proponent submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an Affidavit in a non-judicial stamp paper of Rs 100 bearing 17AA 928904 dated 09.08.2022 stating that this mine will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
Plagiarism certificate	The head of the EIA Consultant certified that this EIA report has been evaluated using licensed software iThenticate plagiarism software and plagiarism was checked on 04.12.2023. The report produced has been analyzed by the system and based analyzed by the system and based on it, I certify the EIA Report produces in accordance with good information technology practice.

xvi. Details of the Environmental Management Plan (EMP):

Sr. No.	ENVIRONMENT	Cost of EMP (Rs. in crores)	
		Capital Cost	Recurring Cost per Annum

A	ENVIRONMENTAL AIR MANAGEMENT		
1	Tanker mounted water sprinklers	0.400	0.150
2	Dust Mist canons	0.150	0.020
SUB TOTAL - A		0.55	0.17
B	ENVIRONMENTAL WATER MANAGEMENT		
1	Garland drains around mine pit	0.040	0.008
2	Silt Settling ponds	0.010	0.002
3	ETP (Capacity- 10 KLD, Oil and grease trap for workshop waste water)	0.100	0.025
4	STP (Capacity – 3 KLD, Sewage treatment for domestic waste water)	0.100	0.025
5	Rain Water Harvesting Structure	0.100	0.025
SUB TOTAL - B		0.350	0.085
C	ENVIRONMENTAL NOISE & GROUND VIBRATION MANAGEMENT		
1	Periodic maintenance of Equipment's, signage installation, weather cock, Noise barrier like green corridor and bund around sensitive receptor	0.010	-
2	Controlled blasting technique	0.100	0.010
SUB TOTAL - C		0.110	0.010
D.	ENVIRONMENTAL SOIL & WASTE DUMP MANAGEMENT		
1	Garland drain around dump (2m x 1.5m)	0.120	0.024
2	Toe wall (Height-2.0) around dump	0.120	-
SUB TOTAL - D		0.240	0.024
E	PLANTATION PROGRAMME		
1	Plantation near soil stripping stock and waste dump, along haul road, Safety Zone, backfilled area, acting noise barrier and upper benches in water filled area (38.94 ha with 39,210 no. of Plants@1500 per ha)	1.10	0.11
SUB TOTAL – E		1.10	0.11
F	TRANSPORT ROAD MAINTENANCE		
1	Strengthening of existing road and its maintenance to be used for transportation of mineral in association with local governance including Safety and speed signage on the road side	3.0	0.30
SUB TOTAL – F		3.0	0.30
G	WILD LIFE CONSERVATION PLAN FOR SCHEDULE-1 SPECIES		
1	Financial outlay for activities proposed in wildlife Conservation Plan of Schedule-I Species (Under Approval)	1.01	-
SUB TOTAL – G		1.01	-
H	BUDGET FOR PUBLIC HEARING ACTION PLAN		
SUB TOTAL – H		0.60	-

GRAND TOTAL	6.96	0.699

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)		
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	EMP Cost	Capital Cost in Cr,	Recurring Cost in Cr,
	Proposed	6.96	0.699
Project Cost	45.35 Cr		
Employment (No.s)	92		

3. Observation and Recommendation of the EAC:

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC noted that instant mine is located adjacent to continuous forest patch having breeding tiger occupancy of Pandharkawada Forest Division and Tipeshwar Wildlife Sanctuary and thus the EAC was of the view that the Ministry may seek comments from National Tiger Conservation Authority (NTCA) in this regard. The EAC also noted that a school and temple is located in the vicinity of the mine lease area. The EAC opined that the Project Proponent needs to submit the sequence of mining near the school & temple and to demonstrate that how the mining activity will not have impact on the school & temple. The EAC observed that the Project Proponent needs to increase the density of plantation as per the guidelines of Central Pollution Control Board (CPCB) and needs to submit the revised plan for greenbelt/plantation all along the mine lease boundary, safety zone plantation, dump area, backfilled area, two uppermost benches etc. The EAC observed that the mined out mineral will be transported to the crusher located in Mukutban mine by road at a distance of about 55 kms) and from there to Cement plant by OLBC (1.9 km). The EAC was of the view that the Project Proponent needs to explore the possibility of installing portable crusher within the instant mine lease area along with the timeline. The EAC also observed that the Project Proponent prepared the Wildlife Conservation Plan in discussion with the local villagers. The EAC noted that as per the authenticated list of flora and fauna letter dated 19.06.2023, Large Bengal Monitor Lizard is found in the core zone. The EAC opined that the Project Proponent needs to prepare the Wildlife Conservation Plan in a scientific way in consultation with the Forest Department. The EAC noted that the land purchase will start after obtaining Environmental Clearance and grant of order of mining lease. The EAC also asked the Project Proponent to submit the merits and demerits of land acquisition. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The EAC noted that instant mine is located adjacent to continuous forest patch having breeding tiger occupancy of Pandharkawada Forest Division and Tipeshwar Wildlife Sanctuary and thus the EAC was of the view that the Ministry

may seek comments from National Tiger Conservation Authority (NTCA) in this regard.

- ii. The Project Proponent needs to explore the possibility of installing portable crusher within the instant mine lease area along with the timeline.
- iii. The Project Proponent needs to submit the sequence of mining near the school & temple and also to demonstrate that how the mining activity will not have impact on the school & temple.
- iv. The Project Proponent needs to prepare the Wildlife Conservation Plan in a scientific way in consultation with the Forest Department. PP also needs to specify the activities proposed along with budget under Wildlife Conservation Plan.
- v. The Project Proponent needs to increase the density of plantation as per the guidelines of Central Pollution Control Board (CPCB) and also needs to submit the revised plan for greenbelt/plantation all along the mine lease boundary, safety zone plantation, dump area, backfilled area, two uppermost benches etc.
- vi. The Project Proponent needs to submit the merits and demerits of land acquisition. PP also needs to submit the phase wise land acquisition plan.

2.2 Proposed 3C2 Limestone Block (Auctioned Block) of M/s. JSW Cement Ltd with Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with Installation of Crusher 1600 TPH with Wobbler in the mine lease area of 386.0215 Ha, located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan – [F.No: :IA-J-11015/49/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/451760/2023; EIA Consultant: J.M. EnviroNet Pvt. Ltd] – Terms of Reference

The instant proposal is for mining of Limestone in 3C2 Limestone Block (Auctioned Block) of M/s. JSW Cement Ltd with proposed Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with Installation of Crusher 1600 TPH with Wobbler in the mine lease area of 386.0215 Ha, located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°16'25.15"N to 27°17'21.393"N and Longitude: 73°52'31.652"E to 73°53'54.28"E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.
- iii. Details of Mine Lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease issued vide letter no. P.2(21) Khan/Group-2/2022 through e-auction process	15.11.2022	Limestone	3 years	Govt. of Rajasthan	386.0215

iv. Land Use/Land Cover of the Mine Lease area:-

Private land	292.3618 ha
Government waste land	90.2725 ha
Forest Land	-
Total Mining lease area (MLA), Ha	386.0215 ha <i>Note: The variation in the total block area (386.0215 Hectare) and calculated by superimposition of block on revenue record (382.6343 hectare) is due to measurement in partial khasras and differences of areas in digitized settlement sheets and revenue record.</i>
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the ML area.

v. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/6/2023-AJM-IBM_RO_AJM
	Date	11.05.2023
	Mineral & (Major/Minor)	Limestone (Major)

	Mine Lease Area, Ha	386.0215 ha
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be used to control ground vibrations, noise & fly rocks.	
Geological Reserves	156.76 Million Tonnes	
Mineable Reserves	129.64 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 5.68 Million TPA 3. Limestone: 2.50 Million TPA 4. OB/IB/Waste: 2.80 Million TPA 5. Top Soil: 0.38 Million TPA	
Life of mine	~55 years	
Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)	
No. of Mine Benches	6 benches at conceptual stage	
Existing Depth, m bgl	It is a proposed mining project so this is not applicable.	
Ultimate Depth of Mining, m bgl	257.5 m AMSL (50 m bgl (maximum depth))	
Ground Water Table, m bgl	192.5 m to 182.5 m AMSL (115 m to 125 m bgl)	
Details of ground water intersection	Water table will not be intersected by mine workings at any stage of mining operation.	
Individual bench slope	75°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler	
Mineral Beneficiation	Nil	
RoM output size	<110 mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW Cement Ltd. via Over Land Belt Conveyor (OLBC) and via road for sale to the prospective buyers.	
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ During the first plan period, 0.21 Million Cu.m of Topsoil will be generated which will be used for Greenbelt development/Plantation. ➤ At conceptual stage, 10.01 Million Cu.m of Top Soil will be generated and it will be used for greenbelt	

	development/ plantation and for carpeting of the backfilled area for plantation. <u>OB/IB/Waste:</u> ➤ During the plan period, no overburden/Interburden/waste will be generated. ➤ At conceptual stage, about 43.44 Million Cu. m of waste will be generated which will entirely be utilized for back filling of mined-out area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	200 KLD	Domestic	7.0 KLD
		Dust suppression	168.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for withdrawal/ intersection along with details of grant and its validity	Working depth during the plan period will be 299.5 m AMSL (8.0 m bgl) and at conceptual stage, ultimate working depth will be 257.5 m AMSL (50 m bgl). Depth of water table in the area is at 192.5 m to 182.5 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Nearest Village	Harima	~2.0 km in SW direction
Nearest School	Govt. Primary School, Banjaron Ki Dhani, Deh is present within the lease area in NW corner	
Nearest Town	Deh	~1.0 km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from North boundary to West direction.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~17.3 km in SW direction
Water Bodies	ChaparNaadi	(~ 4.2 km in SE direction)
	JanjolaiNaadi	(~4.8 km in North direction)
	JakhaliNaadi	(~5.0 km in NW direction)
	Bamanda Nada	(~7.5 km in SE direction)
	PinsariyaNaadi	(~ 8.0 km in SE direction)

Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule -I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt and plantation will be carried out over an area of 196.52 ha (5.93 ha area on 7.5 m lease periphery, on waste dump covering an area of 10.52 ha, 155.44 ha on backfilled area & 24.63 ha on safety zone of school, electric line & Road).
Budget for green plant & plantation till the end of life of mine.	Rs. 5.9 Cr. (196.52 ha, 2,94,255 Saplings)
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1611 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1611 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	5.93 ha
50 m safety zone of nallah, roads, electric lines	24.63 ha

500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that the total mine lease area is 386.0215 ha, out of which 292.3618 ha is private land and 90.2725 ha is Govt. Land which spreads in 2 villages: Harima & Deh. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401394 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 203.50 Crores
Employment	79 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent presented the KML of mine leases of 3C2 Limestone Block, 3C1 Limestone Block and 3D1 Limestone Block. The EAC noted that all three mine leases sharing common boundary and contiguous to each other. The Project Proponent informed the EAC that all these three blocks are non-captive mine. The Limestone produced will be used for cement manufacturing in company's proposed Cement Plant and the Limestone will also be sold to prospective buyers. The Project Proponent informed the EAC that in 3C2 Limestone Block, a Govt. Primary School, Banjaron Ki Dhani, Deh is located within the lease area in NW corner. NH-58 is passing through all these three mine lease areas. A crusher of 1600 TPH & Wobbler will be

installed in all these three mine lease areas respectively. Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed Limestone will be transported to the proposed Cement Plant of M/s. JSW Cement Ltd. via Over Land Belt Conveyor (OLBC) and via road for sale to the prospective buyers. The EAC opined that the Project Proponent needs to submit the year wise sequence of mining operation considering the nearby surface features and their impacts and mitigation measures. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.

Further, the Project Proponent informed the EAC that there are no Wildlife Sanctuaries, National Parks, Biosphere Reserves), Reserve/ Protected Forest within 10km radius study area. The EAC opined that the Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The EAC asked the Project Proponent to verify the list as per the latest Wildlife Protection Amendment Act, 2022. The EAC also asked the Project Proponent to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not. The EAC noted that the tree cutting is involved in all these three mine leases. The EAC asked the Project Proponent to submit the compensatory afforestation plan and also to submit the action plan for tree transplantation. The EAC noted that Rehabilitation & Resettlement (R&R) is involved in all these three mine leases. The EAC asked the Project Proponent to submit the detailed R&R plan in consultation with the local people and also needs to cover all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent informed that compensation provided to PAF is mostly 3-4 times of the land cost. The EAC opined that the Project Proponent needs to submit the livelihood education and skill development plan.

Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3C2 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 2.50 Million TPA, OB/IB/Waste: 2.80 Million TPA, Top Soil: 0.38 Million TPA (Total Excavation: 5.68 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 386.0215 Ha, located at Villages: Harima & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The Project Proponent needs to submit the action plan for shifting the school within the mine lease area.
- ii. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.
- iii. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- iv. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
- v. The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
- vi. The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- ix. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- x. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on

concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.

- xi. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
- xii. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xiii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiv. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xvi. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc.

- xvii. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xviii. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. JSW Cement Ltd or not?
- xix. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
- xx. The Project Proponent needs to initiate action to obtain permission to shift the HT line.

2.3 Proposed 3C1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler in the mine lease area of 300.7284 ha, located at Villages: Harima, Bhadana&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan - [F.No: :IA-J-11015/50/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/452414/2023; EIA Consultant: J.M. EnviroNet Pvt. Ltd] – Terms of Reference

The instant proposal is for mining of Limestone in 3C1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with proposed Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler in the mine lease area of 300.7284 ha, located at Villages: Harima, Bhadana&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent are given below:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.

- ii. The mine lease area is located between Latitude: 27°16'24.639"N to 27°17'20.742"N and Longitude: 73°51'27.709" E to 73°52'32.21 " E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.

- iii. Details of Mine Lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent(LoI) for grant of mining lease issued vide letter no. P.2(22) Khan/Group-2/2022through e-auction process	15.11.2022	Limestone	3 years	Govt. of Rajasthan	300.7284

- iv. Land Use/Land Cover of the Mine Lease area:

Private land	264.0431 ha
Government waste land	36.6953 ha
Forest Land	-
Total Mining lease area (MLA), Ha	300.7284 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the ML area.

- v. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/5/2023-AJM-IBM RO AJM
	Date	12.05.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	300.7284 ha
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be	

	used to control ground vibrations, noise & fly rocks.
Geological Reserves	188.45 Million Tonnes
Mineable Reserves	168.46 Million Tonnes
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 2.04 Million TPA 6. Limestone: 1.45 Million TPA 7. OB/IB/Waste: 0.52 Million TPA 8. Top Soil: 0.07 Million TPA
Life of mine	~119 years
Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)
No. of Mine Benches	5 benches at conceptual stage
Existing Depth, m bgl	It is a proposed mining project and hence not applicable.
Ultimate Depth of Mining, m bgl	274.5 m AMSL (39 m bgl (maximum depth)
Ground Water Table, m bgl	198.5 m to 188.5 m AMSL (115 m to 125 m bgl)
Details of ground water intersection	Water table will not be intersected by mine workings at any stage of mining operation.
Individual bench slope	75°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler
Mineral Beneficiation	Nil
RoM output size	<110 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW Cement Ltd. via Overland belt conveyor and via road for sale to the prospective buyers.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ During the first plan period, 0.14 Million Cu.m of Topsoil will be generated which will be used for Greenbelt development/Plantation. ➤ At conceptual stage, 4.31 Million Cu.m of Top Soil will be generated which will be entirely be used for greenbelt development/ plantation and for carpeting of the backfilled area for plantation. <u>OB/IB/Waste:</u> ➤ During the plan period, no overburden/Inter-burden/waste will be generated. ➤ At conceptual stage, about 19.86 Million Cu.m of waste will be utilized for back filling of mined-out area.
Generation of Mineral Rejects/ Waste & its Management during plan period &	-

conceptual period	

vi. Water requirement:

Total water requirement	200 KLD	Domestic	7.0 KLD
		Dust suppression	168.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for withdrawal/ intersection along with details of grant and its validity	Working depth during the plan period will be 295 m AMSL (18.5 m bgl) and at conceptual stage, ultimate working depth will be 274.5 m AMSL (39 m bgl). Depth of water table in the area is 198.5 m to 188.5 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance &Directions
Nearest Village	Harima	~1.0 km in SW direction
Nearest Town	Deh	~3.0 km in NE direction
Nearest School	Govt. Primary School, Banjaron Ki Dhani, Deh	~0.06 Km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from East boundary to the South direction.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~15.7 km in SW direction
Water Bodies	JakhaliNaadi	~4.0 km in NW Direction
	JanjolaiNaadi	~5.4 km in North Direction
	ChaparNaadi	~ 5.9 km in SE Direction
	Bamanda Nada	~9.0 km in SE Direction
	PinsariyaNaadi	~ 9.3 km in SE Direction
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.

National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule - I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt and plantation will be carried out over an area of 116.61 ha (5.18 ha area on 7.5 m lease periphery, 95 ha backfilled area, 4.13 ha area will be covered under top bench plantation & 12.3 ha under safety zone of road, school & other virgin area).
Budget for green plant & plantation till the end of life of mine.	Rs. 3.50 Cr. (116.61 ha, 174,915 Saplings)
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1378 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1378 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	5.18 ha
50 m safety zone of nallah, roads, electric lines	12.3 ha
500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that the total mine lease area is 300.7284 ha, out of which 264.0431 ha is a private land and 36.6953 ha is a Govt. Land which spreads in 3 villages: Harima, Bhadana&Deh.Land will be purchased with negotiation and R&R provisions will be followed as per Central and State

	Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401395 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 198.45 Crores
Employment	91 persons

3. Observation and Recommendation of the EAC: -

The EAC deliberated the instant proposal (3C1 Limestone Block) along with 3C2 Limestone Block and 3D1 Limestone Block as all these mine leases sharing common boundary and contiguous to each other. Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3C1 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 1.45 Million TPA, OB/IB/Waste: 0.52 Million TPA, Top Soil: 0.07 Million TPA (Total Excavation: 2.04 Million TPA) along with installation of Crusher of 1600 TPH with Wobbler in the mine lease area of 300.7284 ha, located at Villages: Harima, Bhadana & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.

- ii. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- iii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
- iv. The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
- v. The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.
- vi. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- vii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- viii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- ix. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- x. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit

the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.

- xi. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc.
- xvi. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.

- xvii. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. JSW Cement Ltd or not?
- xviii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.4 Proposed 3D1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 357.0937 ha, located at Villages: Harima, Sarasani&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan - [F.No: :IA-J-11015/46/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/452877/2023; EIA Consultant: J.M. EnviroNet Pvt. Ltd] – Terms of Reference

The instant proposal is for mining of Limestone in 3D1 Limestone Block (Auctioned Block) of M/s. JSW Cement Limited with proposed Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 357.0937 ha, located at Villages: Harima, Sarasani&Deh, Tehsil: Nagaur&Deh, District: Nagaur, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent are given below:

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category “A” of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°15'55.751"N to 27°16'25.809"N and Longitude: 73°51'30.391"E to 73°53'54.280" E. The mine lease area falls under the Survey of India Toposheet No: G43B15 (45E/15) and falls in Seismic Zone-II.

iii. Details of Mine Lease:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of	30.06.2023	Limestone	3 years	Govt. of Rajasthan	357.0937

mining lease vide Lr No. P.3(10) Khan/Group-2/2017 issued through e-auction process					

iv. Land Use/Land Cover of the Mine Lease Area:-

Private land	301.8498 ha
Government waste land	55.2439 ha
Forest Land	-
Total Mining lease area (MLA), Ha	357.0937 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.
Additional information (if any)	It is proposed to install a Crusher of 1600 TPH within the mine lease area.

v. Details of Mining Plan:-

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines (IBM)	Letter No.	E-8702-MCDR-MPC0LST/21/2023-AJM -IBM RO AJM
	Date	06.12.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	357.0937
	Validity	5 years from the date of Mining Lease deed Execution
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Drilling will be done with sharp drill bits. Drill machine equipped with wet drilling arrangement. Controlled blasting with proper spacing, burden, stemming and optimum charge/delay to be adopted. NONEL will be used to control ground vibrations, noise & fly rocks.	
Geological Reserves	199.15 Million Tonnes	
Mineable Reserves	158.03 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 1.40 Million TPA 9. Limestone: 1.0 Million TPA 10. Waste: 0.34 Million TPA 11. Top Soil: 0.06 Million TPA	
Life of mine	~161 years	
Mine Bench Height & Bench Width	Bench height: 8 m (Maximum) Bench Width: 15 m (Minimum)	
No. of Mine Benches	4 benches at conceptual stage	
Existing Depth, m bgl	It is a proposed mining project and hence not	

	applicable.
Ultimate Depth of Mining, m bgl	274.5 m AMSL (30 m bgl (maximum depth)
Ground Water Table, m bgl	124 m AMSL to 184 m AMSL (115 m to 125 m bgl)
Details of ground water intersection	Water table will not be intersected by mine workings at any stage of mining operation.
Individual bench slope	75°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of capacity 1600 TPH & wobbler
Mineral Beneficiation	Nil
RoM output size	<110 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to crusher by 40 T dumpers via haul road. Crushed limestone will be transported to proposed Cement Plant of M/s. JSW Cement Ltd. via Overland belt conveyor and via road for sale to the prospective buyers.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> ➤ During the first plan period, 21255Cu.m of Topsoil will be generated which will be used for Greenbelt development/Plantation. ➤ At conceptual stage, total 1015336.76 Cu.m of Top Soil will be generated which will be entirely be used for greenbelt development/ plantation. <u>Waste:</u> ➤ During the plan period, no overburden in the form of Soil/ alluvium will be generated. ➤ At conceptual stage, about 27.51 Million Cu.m of waste generated will be utilized for back filling of mined-out area.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	200 KLD	Drinking & Domestic	5.0 KLD
		Dust suppression	170.0 KLD
		Greenbelt/Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	Water will be sourced from Ground water (Borewells) and mine sump water (as & when developed).		
Permission for withdrawal/ intersection along with details of	Working depth during the plan period will be 301 m AMSL (8.0 m bgl) and at conceptual stage, ultimate working depth will be 279 m AMSL (30 m bgl). Depth of water table in the		

grant and its validity	area is at 124 m AMSL to 184 m AMSL (115 m to 125 m bgl). Hence, there is no possibility of groundwater table intersection by mine workings at any stage of mining operation.

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest:

Particulars	Particular's Name	Distance & Directions
Nearest Village	Harima	~150 m in SW direction
Nearest School	Govt. Upper Primary School, Harima	~300 m in SW direction
Nearest Town	Deh	~3.0 km in NE direction
Nearest State/National Highway	NH-58	Passing through the lease area from North-west corner.
Interstate Boundary	None	None
Railway Station/Railway line	Nagaur Railway Station	~15.1 km in SW direction
Water Bodies	ChhaparNaadi	(~ 3.8 km in SE)
	JakhaliNaadi	(~ 5.4 km in NW)
	BamandaNaadi	(~ 6.6 km in SE)
	JanjolaiNaadi	(~ 7.0 km in North)
	PinsariyaNaadi	(~ 7.6 km in SE)
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study is under process, if any schedule - I found in the study area, Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be ha 140.22 ha on backfilled area and 10.79 ha area including Greenbelt along 7.5 m Mine Periphery & Plantation in Safety Zone etc.).
Budget for green plant & plantation till the end of life of mine.	Rs. 4.5 Cr.
Budget for nursery	N/A
Details of existing plantation and its survival rate	It is a proposed mining project.
No. of tree cuts in the mine lease area and compensatory afforestation	No. of trees to be cut: 1570 (tentative figure considering entire life of mine) No. of trees proposed to be planted: 150 <i>Note: 1570 trees to be cleared and 150 trees to be transplanted is a tentative figure. Young trees are proposed to be transplanted and the figure may change after detailed study.</i>
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	43.1137 ha area including greenbelt Road, HT Line, Power line safety zone plantation etc.
50 m safety zone of nallah, roads, electric lines	

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the total mine lease area is 357.0937 ha, out of which 55.2439 ha is Govt. Land and 301.8498 ha is a Pvt land which spreads in 3 villages: Harima, Sarasani&Deh.Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications..

xi. Court case details:

Court Case, No and its present status	The Project Proponent submitted a undertaking vide letter dated 24.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.
Undertaking by Project Proponent w.r.t court case	

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a nonjudicial stamp paper of Rs 100 bearing no: 77AA 401393 dated 24.11.2023 stating that the company undertakes by affidavit to comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 197.60 Crores
Employment	82 persons

3. Observation and Recommendation of the EAC: -

The EAC deliberated the instant proposal (3D1 Limestone Block) along with 3C2 Limestone Block and 3C1 Limestone Block as all these mine leases sharing common boundary and contiguous to each other. Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s. JSW Cement Ltd for mining of Limestone in 3D1 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity: 1.0 Million TPA, Waste: 0.34 Million TPA, Top Soil: 0.06 Million TPA (Total Excavation: 1.40 Million TPA) along with installation of Crusher 1600 TPH with Wobbler in the mine lease area of 357.0937 ha, located at Villages: Harima, Sarasani & Deh, Tehsil: Nagaur & Deh, District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The EAC was of the view that the working in the common boundary needs to be reflected in the mining plan.
- ii. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- iii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
- iv. The Project Proponent needs to submit the detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
- v. The Project Proponent needs to submit the letter from the State Forest Department regarding whether the instant mine leases fall under Aravalli or not.

- vi. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- vii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- viii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- ix. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- x. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
- xi. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central

Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

- xiii. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc..
- xvi. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan in consultation with the local people. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xvii. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. JSW Cement Ltd or not?
- xviii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

Day 3: 28th December, 2023 (Thursday)

3.1 Proposed Rata - Mandha Limestone Mine (Auctioned Block) of M/s. Deccan Cements Limited with Limestone Production Capacity: 1.5 Million TPA along with installation of Crusher 750 TPH in the mine lease area of 420.0 ha, located at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan – [IA-J-11015/48/2023-IA-II(NCM), Proposal No: IA/RJ/MIN/453669/2023; EIA Consultant: J.M. EnviroNet Pvt. Ltd] – Terms of Reference (ToR)

The instant proposal is for mining of Limestone in Rata - Mandha Limestone Mine (Auctioned Block) of M/s Deccan Cements Limited with proposed Limestone Production Capacity: 1.5 Million TPA along with installation of Crusher 750 TPH in the mine lease area of 420.0 ha, located at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°18'31.2441" N to 27°19'37.24040" N and Longitude: 70°52'13.80922" E to 70°53' 31.2778" E. The mine lease area falls under the Survey of India Toposheet No: G42E15 and falls in Seismic Zone-V.

iii. Details of Mine Lease:

S. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease granted vide LrNo. P.3(1) Khan/Group-2/2022through e-auction process conducted by the Govt. of Rajasthan.	08.03.2023	Limestone (Major)	2 years	Govt. of Rajasthan	420.00 ha

iv. Land Use/Land Cover of the Mine Lease Area:

Private land	57.21 ha
Government waste land	362.79 ha
Forest Land	-
Total Mining lease area (MLA), Ha	420.0 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Details of Mining Plan:-

Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/11/2023-AJM-IBM_RO_AJM
	Date	08.09.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	420.00 ha
	Validity	5 years from the date of Mining Lease registration
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	
Drilling/Blasting	Mining will be done by mechanized opencast method using Hydraulic excavator/loader. Drilling will be carried out with the help of hydraulic drill machines equipped with arrangement for wet drilling, dust collectors and sample collection. Controlled blasting will be carried out. No secondary blasting is proposed. Rock breaker will be deployed for breaking the oversized boulders. To control the ground vibration as well as fly rock only 100% Non-Electric (NONEL) detonators will be used.	
Geological Reserves	209.71 Million TPA (As on 10.08.2023)	
Mineable Reserves	168.83 Million TPA (As on 10.08.2023)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation: 1.56 Million TPA <u>Breakup of Total Excavation:</u> 1. Limestone: 1.50 Million TPA 2. Over Burden: 0.06 Million TPA	
Life of mine	116 years (As on 10.08.2023)	
Mine Bench Height & Bench Width	Bench height: 9 m (During plan period), 8 m (During conceptual stage). Bench Width: 25 m (During plan period), 9 m (During conceptual stage).	
No. of Mine Benches	2 (In Pit 1) [during plan period], 5 (In Pit 3) and 4 (In Pit no 1 & 2) [During conceptual stage]	
Existing Depth, m bgl	It's a greenfield project and hence not applicable.	
Ultimate Depth of Mining, m bgl	140 m RL (32 m) (In Pit no 1 & 2) 132 m RL (40 m) (In Pit 3)	
Ground Water Table, m bgl	70 m bgl	
Details of ground water intersection	The water table in the area is about 70 m deep and the ultimate working depth will be 40 m bgl. Thus, water table will not be intersected during mining at any stage.	
Individual bench slope	80°	
Overall pit slope	45°	

Details of existing/ proposed Crusher	Capacity of 750 TPH crusher is proposed.
Mineral Beneficiation	Nil
RoM output size	Nil
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone will be transported from mine face to head by dumpers via haul road and it will be transported to end users via road or belt conveyor.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Over Burden:</u> ➤ During the plan period 0.064 Million Tonnes of waste will be generated which will be stacked temporarily and will be utilized further for backfilling. ➤ During conceptual stage, 18.83 Million Tonnes of waste will be generated, out of which 18.45 million tonnes of waste will be backfilled over an area of 23.07 ha and remaining 0.38 million tonnes of waste will be stacked in dump over an area of 5.04 ha which will be rehabilitated by plantation.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	70 KLD	Domestic	10.0 KLD
		Dust suppression	35.0 KLD
		Plantation	20.0 KLD
		Workshop	5.0 KLD
Source	IGNP canal (SagarmalGopa Branch) and mine sump as and when developed. Permission will be taken from competent authority for using of canal water.		
Permission for withdrawal/ intersection along with details of grant and its validity	The water table in the area is about 70 m deep and the ultimate working depth will be 40 m bgl. Thus, water table will not be intersected during mining at any stage and hence permission is not required.		

vii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Directions
Nearest Village	Kinya	~1.2 km in NW direction
Nearest Town	Jaisalmer	~111 km in SE direction
Nearest State/National Highway	MDR-103	~4.3 km in NNE direction
	MDR-19	~5.4 km in NW direction

Interstate Boundary	None	None
Railway Station/Railway line	Jaisalmer Railway Station	~44 km in SSE Direction
Water Bodies	Indira Gandhi Canal (SagarmalGopa Branch)	~4.5 km in NNE direction
Forest	None	None

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	No Forest land involved in mining lease area. Letter from competent authority will be taken.
National Park	No	No National Park, Wildlife Sanctuary, Elephant/Tiger Reserve involved in study area. Letter from competent authority will be taken.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	This proposal is for ToR, study will be carried out, if any schedule - I species found in the study area Wildlife Conservation Plan will be prepared during the preparation of EIA/EMP Report.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area under greenbelt and plantation will be under 76.052 ha (6.127 ha area on 7.5 m lease periphery +5.04 ha on waste dump + 23.07 ha on backfilled area + 20.94 ha on 2 no of top most benches + 20.875 ha on 45 m safety one of tar road).
Budget for green plant & plantation till the end of life of mine.	Rs. 2.30 Crore
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	50no.s
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	6.127 ha
50 m safety zone of nallah, roads,	20.875 ha

electric lines	
500 m safety zones of nearest habitation villages	Nil

x. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has submitted that the total mine lease area is 420 ha, out of which 57.21 ha is private land. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.

xi. Court case details:

Court Case, No and its present status	❖ The e-auction organized for a Rata Mandha Limestone block. The initial attempt didn't receive any bids at the 10% reserve price. ❖ In the second attempt of auction, DCL and SCL participated in which the highest bid of 10.40 percent was proposed by SCL which was declared as Preferred Bidder. Considering that the bid submitted by SCL was relatively less received by the State Government and considering the revenue interest involved in the matter and wider public interest and government revenue, the bid submitted by M/s Shree Cement Limited was rejected. ❖ Following the rejection, Shree Cement Limited filed a case (Civil Writ Petition No. 16345/2018) before the Honourable High Court in Jodhpur against the government's order dated July 23, 2019. As of now, no stay order has been issued by the Honourable Court, and the case remains pending. ❖ In the third attempt of auction, M/s Deccan Cements Limited declared as the Preferred Bidder with a winning bid of 15.25% in the e-auction conducted on 16.12.2021 and LOI has been issued by Government of Rajasthan vide letter No. P.3(1) Khan/Group-2/2022 dated 08.03.2023 for grant of Mining Lease for the said Block for a period of 2 years.
Undertaking by Project Proponent w.r.t court case	N/A

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non judicial stamp paper of Rs 100 bearing no: AN 756550 dated 01.12.2023 stating that the company undertakes by affidavit that it will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC

xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 45 Crores
Employment	68 persons

3. Observation and Recommendation of the EAC: -

The Project Proponent/EIA Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent showed the boundary of the mine lease area. The Project Proponent informed the EAC that One HT line passes through mine lease area. Safety barriers are left in both sides of HT line and the same will not be disturbed at any stage of mining activity. Tar road of length of 2.20 km exists within the mine lease area. Nearest village is Khinya Village located at a distance of ~1.2 km in NW direction. A School is also located in Khinya Village. Nearest water body is Indira Gandhi Canal (~4.5 km, NNE). Dumpers of 20 Tonnes capacity bucket capacity will be used for transportation of mineral from mine face to the crusher. During the initial period of 2 years, Limestone produced from this mine will be directly sold in open market and then in fourth/fifth year Limestone will be used in upcoming cement plant which will be installed in the year 2030. During the first two years, Limestone will be transported by road at a distance of 50 km to the Sanu railway siding. The EAC was of the view that the Project Proponent needs to double the width of road. The Project Proponent informed the EAC that at the end of conceptual stage, an area of 329.45 ha will be excavated out of which 285.44 ha will be converted into water reservoir, 23.07 ha will be backfilled and an area of 20.94 ha will be reclaimed on top most 2 benches. During conceptual stage, about 18.83 Million Tonnes of waste will be generated, out of which 18.45 million tonnes of waste will be backfilled over an area of 23.07 ha and remaining 0.38 million tonnes of waste will be stacked in dump over an area of 5.04 ha which will be rehabilitated by plantation. Till 30 years, mining will be carried out in Govt. land.

The EAC asked about the status of court case. The Project proponent informed the EAC that initially e-auction organized for the Rata Mandha Limestone block. The initial attempt didn't receive any bids at the 10% reserve price. In the second attempt of auction, Deccan Cements Limited (DCL) and Shree Cement Limited (SCL) participated in which the highest bid of 10.40 percent was proposed by SCL and declared as a Preferred Bidder. Considering that the bid submitted by SCL was relatively less and considering the revenue interest involved in the matter and wider public interest and government revenue, the bid submitted by Shree Cement Limited was rejected. Then, the Shree Cement Limited filed a case (Civil Writ Petition No. 16345/2018) before the Hon'ble High Court in Jodhpur against the Govt. order dated July 23, 2019. As of now,

no stay order has been issued by the Hon'ble Court, and the case remains pending. Next date of hearing is 23.04.2024. In the third attempt of auction, M/s Deccan Cements Limited declared as the Preferred Bidder with a winning bid of 15.25% in the e-auction conducted on 16.12.2021 and accordingly Letter of Intent (LoI) for grant of mining lease was granted by the Govt. of Rajasthan vide letter dated 08.03.2023 for the said block for a period of 2 years. The EAC opined that the instant Terms of Reference would be subject to the outcome of the court case filed before the Hon'ble High Court in Jodhpur in Civil Writ Petition No. 16345/2018.

Based on the discussions held, the EAC in its meeting held during 26-28 December, 2023, under the provisions of EIA Notification, 2006 and subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference to M/s Deccan Cements Limited for mining of Limestone in Rata - Mandha Limestone Mine (Auctioned Block) with proposed Limestone Production Capacity: 1.5 Million TPA along with installation of Crusher 750 TPH in the mine lease area of 420.0 ha, located at Village: Rata Mandha, Tehsil: Mohangarh, District: Jaisalmer, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The instant Terms of Reference would be subject to the outcome of the court case filed before the Hon'ble High Court in Jodhpur in Civil Writ Petition No. 16345/2018.
- ii. The Project Proponent needs to submit the timeline and action plan for transporting the Limestone through OLBC.
- iii. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- iv. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
- v. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.

- vi. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- vii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- viii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road, existing and additional traffic load to the NH/SH/MDR and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.
- ix. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- x. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
- xi. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- xii. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.

- xiii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiv. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xv. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xvi. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. The Project Proponent needs to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. An action plan for land acquisition in consent with the local people also needs to be submitted. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xvii. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Deccan Cement Ltd or not?
- xviii. The Project Proponent shall submit the action plan along with timeline for doubling the width of the village road which is to be used for transportation.
- xix. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

3.2 Mahulsukha Iron and Manganese Ore Block of M/s Patnaik Minerals Private Ltd for mining of Iron and Manganese Ore in the mine lease area of 390.317 ha (as per DGPS)/399.838 ha (as per ROR), with proposed production capacity of Iron

Ore: Total Excavation: 1.662977 MTPA; ROM: 1.0MTPA and Manganese Ore: Total Excavation: 1.407519 MTPA; ROM: 0.15MTPA, located at Villages Randa, Rantha and Bhutuda under Bonai Sub-Division and Lahunipada Tehsil, Sundargarh District, Odisha - [F. No: J-11015/75/2020-IAII(M), Proposal No: IA/OR/MIN/180360/2020] – Environmental Clearance (EC)

The instant proposal is for mining of Mahulsukha Iron and Manganese Ore Block of M/s Patnaik Minerals Private Ltd for mining of Iron and Manganese Ore in the mine lease area of 390.317 ha (as per DGPS)/399.838 ha (as per ROR), with proposed production capacity of Iron Ore: Total Excavation: 1.662977 MTPA; ROM: 1.0MTPA and Manganese Ore: Total Excavation: 1.407519 MTPA; ROM: 0.15MTPA, located at Villages Randa, Rantha and Bhutuda under Bonai Sub-Division and Lahunipada Tehsil, Sundargarh District, Odisha.

2. Observation and Recommendation of the EAC: -

The EAC noted that the Project Proponent vide letter dated 12.12.2023 informed that due to unavoidable circumstances they are not in position to present the technical presentation and hence requested to defer the proposal. Based on the request of the Project Proponent letter dated 12.12.2023, the EAC **deferred** the proposal.

3.3 Gojoli-Somanpalli Dongargaon Limestone Block (Auctioned Block) of M/s Dalmia Cement (Bharat) Ltd. for mining of Limestone with Limestone Production Capacity 1.0 Million TPA, Soil: 0.10 Million TPA, OB: 0.15 Million TPA & Waste: 0.25 Million TPA (TotalExcavation-1.50 Million TPA) along with installation of Impact Crusher-500 TPH Capacity with Screen/Wobbler in the mine lease area of 646.55 ha, located at Villages: Somanpalli, Dhaba, ChakDubarpeth, ChakNavegaon, GojoliMakta and ChakGojoli, Tehsil: Gondpipri, District: Chandrapur, Maharashtra – [Proposal No: IA/MH/MIN/285399/2022, F.No: IA-J-11015/31/2022-IAII(NCM), EIA Consultant: M/s Aditya Environmental Services Pvt.Ltd] – Terms of Reference (ToR)

The instant proposal is for grant of Terms of Reference for mining of Limestone in Gojoli-SomanpalliDongargaon Limestone Block (Auctioned Block) of M/s Dalmia Cement (Bharat) Ltd. with Limestone Production Capacity 1.0 Million TPA, Soil: 0.10 Million TPA, OB: 0.15 Million TPA & Waste: 0.25 Million TPA (Total Excavation-1.50 Million TPA) along with installation of Impact Crusher-500 TPH Capacity with Screen/Wobbler in the mine lease area of 646.55 ha, located at Villages: Somanpalli, Dhaba, ChakDubarpeth, ChakNavegaon, GojoliMakta and ChakGojoli, Tehsil: Gondpipri, District: Chandrapur, Maharashtra.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2(b) Mineral Beneficiation and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 19°35'50.61"N to 19°40'40.89"N and Longitude: 79°38'40.56"E to 79°40'00.39"E. The mine lease area falls under the Survey of India Toposheet No: 56 M/10 and falls in Seismic Zone – II.
- iii. The proposal was earlier considered in the 2ndEAC (Non-Coal Mining) meeting held during 16 - 18 August, 2022 wherein the EAC noted that the instant proposal located at an environmental sensitivity area due to presence of 185.83 ha of forest land involved in the mine lease area, Tiger corridor (Kanha-Navegaon-Nagzira-Tadoba-Indravati), Kanhargaoon Wildlife Sanctuary (~450 m, W), area of 11.12 ha under seasonal nalla/pond, 17.95 ha under road and 1.09 Ha under settlement inside the mine lease area. Kanhargaoon Wildlife Sanctuary situated at 450 meters from lease boundary is a part of identified tiger corridor connecting tiger meta populations in the existing tiger reserves of the landscape. Some forest and Govt. lands near the lease area may also be playing similar role for meta population management. In view of the above, the EAC opined that the comment from the National Tiger Conservation Authority (NTCA) is a prerequisite for further consideration of the instant proposal for Terms of Reference (ToR). Therefore, the EAC deferred the proposal and asked the Project Proponent to submit the comments from the National Tiger Conservation Authority (NTCA) w.r.t Tiger corridor and State authority for wildlife corridor. Then, the Project Proponent submitted the information on 09.08.2023 and 04.12.2023 in Parivesh portal and accordingly the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its EAC meeting held during 16-18 August, 2022 and compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 16-18 August, 2022	Reply by Project Proponent
1	Comments from the National Tiger Conservation Authority (NTCA) w.r.t Tiger corridor	The NTCA Division gave their comments on 21.09.2023 which are as follows: 1. The ML area is located at approximate distances of 40 km from TadobaAndhari Tiger Reserve (TATR), 51 km from Kawal Tiger

		Reserve and 86 km from Indravati Tiger Reserve. Nearest Protected Areas to the ML area are Kanhargao WLS (approximately 450 m) and Chaprala WLS (approximately 14 km). Moreover, the ML area is at an approximate distances of 7.5 km from IndravatiTadoba tiger (least cost pathway) corridor and 46 km from IndravatiNavegaonNagzira tiger (least cost pathway) corridor delineated by NTCA and Wildlife Institute of India. A map is enclosed in this regard. 2. The ML area is part of tiger corridors delineated for Eastern Vidharbha Landscape (EVL) by Wildlife Institute of India and is adjacent to the tiger corridor delineated by Maharashtra Forest Department in the Tiger Conservation Plan for TadobaAndhari Tiger Reserve. A map is enclosed in this regard. 3. The ML area has presence of tigers in its vicinity as per all India tiger estimations carried out in 2022 and 2018. Maps showing tiger distribution are enclosed in this regard. 4. As per 2022 cycle of all India tiger estimation, the ML area had presence of large mammals and major tiger prey species such as leopard, sloth bear, dhole, gaur, chital and sambar in its vicinity. Many of these species are endangered and under Schedule I of the Wildlife (Protection) Act, 1972. 5. Currently, both Kawal and Indravati Tiger Reserves support low density tiger populations below their potential. Recovery of tigers in these Tiger Reserves are possible only when the habitat connectivity with major source populations in the landscape such as Tadoba and

		Nagzira are maintained. Kanhargaon WLS, Junonah RF and Chichpalli Range of Chandrapur Forest Division are important stepping stone habitat connectivity in between Kawal and Tadoba which got further strengthened by declaration of Kanhargaon as a Protected Area. Permeability of these corridors are currently already under fragmentation threats from urban sprawls and many linear infrastructures such as railway tracks, highways and mining. Impact of any further developmental project in this landscape will be cumulative and detrimental for the persistence of corridor functionality. 6. EAC observed that about 11.12 ha of ML area is under seasonal nalla/pond. The area is drained by few first/second order seasonal nallas. Some originates within the lease area and some traverse the lease area. All drains into DabhaNalla which further merges into Wardha River. Abstraction of water for mining should be subject to thorough understanding on its impact on minimum ecological flow for these nallahs and Wardha river. 7. EAC may like to take cognizance of these ecological concerns before granting any statutory clearance to the proposed limestone mining project.
2	Comments from State authority for wildlife corridor.	The Project Proponent submitted the letter from the Office of the Additional Principal Chief Conservator of Forests (Wildlife) East, Nagpur vide No: Desk-1(B)/Survey/2022-23/1340 Dated: 24.03.2023 stating that the office of the Principal Chief Conservator of Forests (Wildlife), M.S. Nagpur has attested the maps. The distance of the Wildlife Sanctuary, Tiger Corridor and Reserve Forest from the mine lease area as per the authenticated location map are given

		below in table:
S. No	Particulars	Distance & Direction from mining lease
1	Kanhargaon WLS	0.45km, W
2	Tiger Corridor (WII)	7.4 km, W
3	Dongargaon RF	0.6 km, NE
4	Watrana RF	0.04 km, NE
5	Dabha RF	1.6 km, W
6	Khararpet RF	2.4 km, NE
7	Karinji RF	0.05 km, NW
8	Panchgaon RF	2.5 km, NW
9	Ghanpur RF	8.9 km, NW
10	Muthampet RF	9 km, SE
11	Kadamba RF	9.5 km, SW
12	Dongargaon PF	1.1 km, NE
13	Palsori PF	8 km, NW
14	Wamapalli RF	5.79 km, W

2. Observation and Recommendation of the EAC: -

The Project Proponent briefed the EAC about the distance of the Wildlife Sanctuary, Tiger Corridor and Reserve Forest from the mine lease area within 10 km radius of the study area. The EAC also noted the comments given by the National Tiger Conservation Authority (NTCA) on 21.09.2023. The Project Proponent also informed the EAC that mining plan was approved by Indian Bureau of Mines (IBM), Nagpur vide letter dated 19.03.2021, prior to declaration of Kanhargaon Wildlife Sanctuary. About 54.5 ha of Lol area falling within the 1 km buffer from the Kanhargaon Wildlife Sanctuary, has been demarcated as Non-Mining Zone as per Hon'ble Supreme Court Judgement dated 03/06/2022. Life of the mine will be reduced to 33 years from 37 years due to blocking of 3.61 Million Tonnes of Reserves. Accordingly, Modified Mining Plan is under preparation and approved Modified Mining Plan will be submitted during EC. Further, the Project Proponent informed the EAC that application for Wild Life Clearance has been re-submitted vide Proposal No.WL/MH/MIN/QRY/448509/2023 dated 19/10/2023 on PARIVESH 2.0. The EAC also noted the comments of NTCA which are as follows: -

- The ML area is part of tiger corridors delineated for Eastern Vidharbha Landscape (EVL) by Wildlife Institute of India and is adjacent to the tiger corridor delineated by Maharashtra Forest Department in the Tiger Conservation Plan for TadobaAndhari Tiger Reserve.
- The ML area has presence of tigers in its vicinity as per all India tiger estimations carried out in 2022 and 2018.

- iii. As per 2022 cycle of all India tiger estimation, the ML area had presence of large mammals and major tiger prey species such as leopard, sloth bear, dhole, gaur, chital and sambar in its vicinity. Many of these species are endangered and under Schedule I of the Wildlife (Protection) Act, 1972.
- iv. Currently, both Kawal and Indravati Tiger Reserves support low density tiger populations below their potential. Recovery of tigers in these Tiger Reserves are possible only when the habitat connectivity with major source populations in the landscape such as Tadoba and Nagzira are maintained. Kanhargaoon WLS, Junonah RF and Chichpalli Range of Chandrapur Forest Division are important stepping stone habitat connectivity in between Kawal and Tadoba which got further strengthened by declaration of Kanhargaoon as a Protected Area. Permeability of these corridors are currently already under fragmentation threats from urban sprawls and many linear infrastructures such as railway tracks, highways and mining. Impact of any further developmental project in this landscape will be cumulative and detrimental for the persistence of corridor functionality.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the Project Proponent needs to submit the proposal for obtaining approval of the National Board for Wildlife for Tiger reserves under Section 38 (O) (1) (g) of the Wildlife (Protection) Act, 1972. The EAC also opined that the Ministry may seek comments from the Wildlife Institute of India (WII) since the mine lease area is part of tiger corridors delineated for Eastern Vidharbha Landscape (EVL) by Wildlife Institute of India (WII). The EAC also asked the Project Proponent to refer the report prepared by Wildlife Institute of India/Maharashtra Forest Department/All India tiger estimations with respect to Tiger distribution and also to submit the point wise reply to the comments of NTCA. Owing to the environmental sensitivity of the mine lease area, the EAC **deferred** the proposal for want of following additional information: -

- i. The Ministry may seek comments from the Wildlife Institute of India (WII) since the mine lease area is part of tiger corridors delineated for Eastern Vidharbha Landscape (EVL) by Wildlife Institute of India (WII).
- ii. The Project Proponent needs to submit the copy of proposal for obtaining approval of the National Board for Wildlife for Tiger reserves under Section 38 (O) (1) (g) of the Wildlife (Protection) Act, 1972.
- iii. The Project Proponent needs to refer the report prepared by Wildlife Institute of India/Maharashtra Forest Department/All India tiger estimations with respect to Tiger distribution and also to submit the point wise reply to the comments of NTCA.

- iv. The Project Proponent needs to submit the approved Modified Mining Plan.

3.4 Mining of Bajri (Minor Mineral) with proposed production capacity 5.60 MTPA (ROM) in the mine lease area of 3843.098 Ha (19011.89 Bigha), located at Villages Annapurna, Arjiyana, Indrana, Kundal, etc. of Tehsil Siwana, District Barmer, Rajasthan by M/s Ridhi Siddhi Associates [File No. J-11015/427/2013-IA.II(M); Proposal No. IA/RJ/MIN/20595/2013] – Reconsideration of Environmental clearance

The instant proposal is for mining of Bajri (Minor Mineral) with proposed production capacity 5.60 MTPA (ROM) in the mine lease area of 3843.098 Ha (19011.89 Bigha), located at Villages Annapurna, Arjiyana, Indrana, Kundal, etc. of Tehsil Siwana, District Barmer, Rajasthan by M/s Ridhi Siddhi Associates.

2. Observation and Recommendation of the EAC: -

The EAC noted that the Project Proponent vide letter dated 23.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

Additional Agenda: -

3.5 Amendment in existing Environmental Clearance dated 2nd November, 2007 w.r.t Amalgamation of Korumanipalli & Thollamadugu Limestone Mine (ML Area 205.212 ha) and Korumanipalli Limestone Mine (49.64 ha) of M/s. Penna Cement Industries Ltd with combined production capacity of 2.30 MTPA over an amalgamated mine lease area of 254.856 ha, located at villages Korumanipalli & Thollamadugu, Mandal- Kolimigundla, District- Kurnool, Andhra Pradesh - [F.No: J-11015/654/2007-IA.II(M), IA/AP/MIN/276997/2022] - Amendment in EC

The instant proposal for amendment in EC was earlier considered in the 5th EAC (Non-Coal Mining) meeting held during 18-20, October, 2022 wherein the EAC noted that the instant proposal for amendment in EC dated 02.11.2007 is w.r.t amalgamation of Korumanipalli & Thollamadugu Limestone Mine (ML Area 205.212 ha) and Korumanipalli Limestone Mine (49.64 ha) of M/s. Penna Cement Industries Ltd with combined production capacity of 2.30 MTPA over an amalgamated mine lease area of 254.856 ha. The EAC also noted that the Project Proponent having two separate valid EC's dated 02.11.2007 (ML Area 205.212 ha) and 07.01.2020 (49.64 ha) for the above said mine leases. Further, the EAC noted that the Project Proponent amalgamated the mine lease on 16.03.2021 over an area of 254.856 ha and continued to operate the mines after 16.03.2021 without obtaining amendment in EC.

2. The EAC observed that as per Ministry's SOP dated 07.07.2021, "Violation" means cases where projects have either started the construction work or installation or excavation, whichever is earlier, on site or have expanded the production capacity and /or project area beyond the limit specified in the Environmental Clearance (PriorEC) without obtaining Prior-EC or change of scope without prior approval from the Ministry. The EAC also observed that in the instant case, the Project Proponent has increased the mine lease area from 205.212 ha to 254.856 ha beyond the limit specified in the Environmental Clearance (Prior-EC) dated 02.11.2007 and continued to operate the mines after 16.03.2021 without obtaining amendment in EC. The EAC was of the view that the instant case attracts the violation of the EIA Notification, 2006.

3. During the EAC meeting, the Project Proponent informed the EAC that there was no excess of production has been done and the production capacity is well within the limits of the EC capacity dated 02.11.2007 (ML Area 205.212 ha) and 07.01.2020 (49.64 ha) and there is no violation. PP also informed the EAC that the certificate from the Department of Mines & Geology has been obtained vide letter dated 22.08.2022 stating that the "No Mining has been done in ML-2 after Amalgamation of Mine lease". The EAC asked the Project Proponent that why the PP has approached the Ministry for amendment in EC after one year of amalgamation of mining lease. The Project Proponent/consultant accepted that it was the fault of the Project Proponent and apologized for not applying for amendment in EC well in time after the amalgamation of mining lease on 16.03.2021. Thus, the EAC opined that the instant case attracts the violation of the EIA Notification, 2006 and the EAC advised the Project Proponent to apply for fresh Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021. The EAC also asked the Ministry to take action against the Project Proponent under section 19 of the Environment (Protection) Act, 1986. In view of the above, the EAC returned the proposal in the present form.

4. As per the recommendation of EAC, the Ministry vide letter dated 19.12.2022 requested the Secretary, Environment, Forests, Science & Technology Department, Govt. of Andhra Pradesh to initiate action under the provisions of section 19 of the Environment (Protection) Act, 1986 against the Project Proponent and also to intimate the details of the action taken against the Project Proponent to the Ministry for further necessary action.

5. Then, the Project Proponent vide letter dated 01.12.2023 and 22.02.2023 urged the Ministry that the violation should not be considered in light of the following facts:

- i. No construction work or installation or excavation was done in both the mine without getting EC.
- ii. The Company has not expanded the production capacity mentioned in both the ECs separately ($2.1 + 0.2 = 2.30$ million TPA). Certificate from DMG has been

taken on 22.08.2022 stating that "No Mining has been done in ML-2 after Amalgamation of Mine lease"

- iii. Company has not expanded the ML area from 205.212 ha to 254.856 ha beyond the limit specified in the EC dated 02.11.2007. Both the leases (49.64 ha and 205.012 ha) are contiguous and share common boundary and EC for both the mine has been obtained separately from MoEFCC on 02.11.2007 (205.212 ha) and 07.01.2020 (49.64).
- iv. Also, Company didn't change their scope of work w.r.t technology and others.

6. The Project Proponent also submitted that same matter was heard in the court and the Hon'ble High Court of Andhra Pradesh vide order dated 02.11.2023 in Writ Petition No 22715 of 2023 has directed that *"According to the learned counsel, the said representation has not been disposed of so far. Taking into consideration the nature of controversy and keeping in view the pendency of the representation dated 22.02.2023, said to have been submitted by the petitioner, this court deems it appropriate to dispose of the writ petition, without expressing any opinion on the merits of the matter, with a direction to Respondent No 5 to verify the representation dated 22.02.2023, said to have been submitted by the petitioner, this court deems it appropriate to dispose of the writ petition, without expressing any opinion on the merits of the matter, with a direction to Respondent No 5 to verify the representation dated 22.02.2023 said to have been submitted by the Writ petitioner and take appropriate action/pass appropriate orders, as expeditiously as possible, after affording opportunity of hearing to the writ petitioner, preferably within a period of four (04) weeks from the date of receipt of a copy of this order"*.

7. In view of the above order of Hon'ble High Court of Andhra Pradesh vide order dated 02.11.2023, an opportunity for hearing has been given to the Project Proponent to discuss the matter before the EAC (Non-Coal Mining) in its meeting scheduled to be held on 28.12.2023. The Ministry also issued meeting notice to the Project Proponent vide letter dated 20.12.2023.

8. Observation and Recommendation of the EAC: -

The Project Proponent briefed about their representation letter dated 22.02.2023. The Project Proponent informed the EAC that no construction work or installation or excavation was done in both the mine without getting EC. The production capacity in both the ECs ($2.1 + 0.2 = 2.30$ million TPA) was not increased and Certificate from Dept. of Mining and Geology was obtained on 22.08.2022 stating that *"No Mining has been done in ML-2 after Amalgamation of Mine lease"*. The Project Proponent also informed the EAC that the mine lease area from 205.212 ha to 254.856 ha was not increased beyond the limit specified in the EC dated 02.11.2007. Both the leases (49.64 ha and 205.012 ha) are contiguous and share common boundary and Environment

Clearance's for both the mine was obtained separately from MoEF&CC on 02.11.2007 (205.212 ha) and 07.01.2020 (49.64). There is no change in the scope of work w.r.t technology and others. Further, the Project Proponent requested the EAC to allow the amendment in EC w.r.t amalgamation in existing EC for Korumanipalli & Thollamadugu Limestone mine over an area of 254.856 Ha without considering violation.

The Project Proponent also informed the EAC that the same matter was heard in the Hon'ble High Court of Andhra Pradesh and the Hon'ble High Court vide order dated 02.11.2023 in Writ Petition No 22715 of 2023 directed that *"According to the learned counsel, the said representation has not been disposed of so far. Taking into consideration the nature of controversy and keeping in view the pendency of the representation dated 22.02.2023, said to have been submitted by the petitioner, this court deems it appropriate to dispose of the writ petition, without expressing any opinion on the merits of the matter, with a direction to Respondent No 5 to verify the representation dated 22.02.2023, said to have been submitted by the petitioner, this court deems it appropriate to dispose of the writ petition, without expressing any opinion on the merits of the matter, with a direction to Respondent No 5 to verify the representation dated 22.02.2023 said to have been submitted by the Writ petitioner and take appropriate action/pass appropriate orders, as expeditiously as possible, after affording opportunity of hearing to the writ petitioner, preferably within a period of four (04) weeks from the date of receipt of a copy of this order"*. The EAC noted that in view of the above order of Hon'ble High Court of Andhra Pradesh order dated 02.11.2023, an opportunity for hearing has been given to the Project Proponent by the Ministry letter dated 20.12.2023 to discuss the matter before the EAC (Non-Coal Mining).

The EAC reiterated the earlier minutes of 5thEAC (Non-Coal Mining) meeting held during 18-20, October, 2022. The relevant extract of the minutes are as follows *"The EAC noted that the instant proposal is for amendment in EC dated 02.11.2007 w.r.t Amalgamation of Korumanipalli&Thollamadugu Limestone Mine (ML Area 205.212 ha) and Korumanipalli Limestone Mine (49.64 ha) of M/s. Penna Cement Industries Ltd with combined production capacity of 2.30 MTPA over an amalgamated mine lease area of 254.856 ha. The EAC also noted that the Project Proponent having two separate valid EC's dated 02.11.2007 (ML Area 205.212 ha) and 07.01.2020 (49.64 ha) for the above said mine leases. Further, the EAC noted that the Project Proponent amalgamated the mine lease on 16.03.2021 over an area of 254.856 ha and continued to operate the mines after 16.03.2021 without obtaining amendment in EC". PP also informed the EAC that the certificate from the Department of Mines & Geology has been obtained vide letter dated 22.08.2022 stating that the "No Mining has been done in ML-2 after Amalgamation of Mine lease". The EAC observed that as per Ministry's SOP dated 07.07.2021, "Violation" means cases where projects have either started the construction work or installation or excavation, whichever is earlier, on site or have expanded the*

production capacity and /or project area beyond the limit specified in the Environmental Clearance (PriorEC) without obtaining Prior-EC or change of scope without prior approval from the Ministry. The EAC also observed that in the instant case, the Project Proponent has increased the mine lease area from 205.212 ha to 254.856 ha beyond the limits specified in the Environmental Clearance (Prior-EC) dated 02.11.2007 and continued to operate the mines after 16.03.2021 without obtaining amendment in EC. The EAC was of the view that the instant case attracts the violation of the EIA Notification, 2006. The Project Proponent informed the EAC that there is no any excess of production has been done and the production capacity is well within the limits of the EC capacity dated 02.11.2007 (ML Area 205.212 ha) and 07.01.2020 (49.64 ha) and there is no any violation. The EAC asked the Project Proponent that why the PP has approached the Ministry for amendment in EC after one year of amalgamation of mining lease. The Project Proponent/consultant accepted that it was the fault of the Project Proponent and apologized for not applying for amendment in EC well in time after the amalgamation of mining lease on 16.03.2021. Thus, the EAC opined that the instant case attracts the violation of the EIA Notification, 2006 and the EAC advised the Project Proponent to apply for fresh Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021. The EAC also asked the Ministry to take action against the Project Proponent under section 19 of the Environment (Protection) Act, 1986. In view of the above, the EAC returned the proposal in the present form".

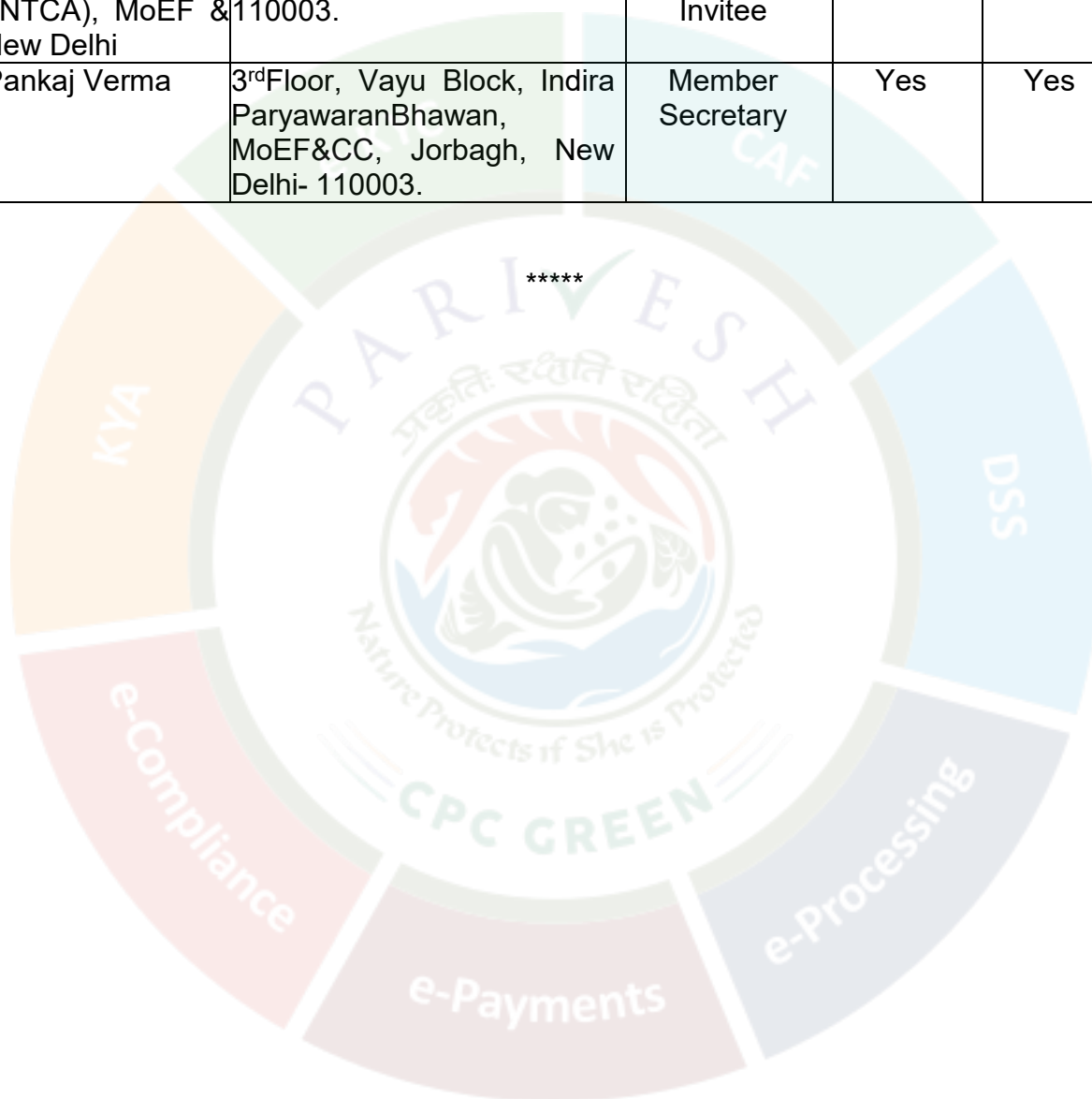
After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC opined that the decision made in the earlier EAC (Non-Coal Mining) meeting held during 18-20, October, 2022 shall remain unchanged. Thus, the EAC propounded that the instant case attracts the violation of the EIA Notification, 2006 and advised the Project Proponent to apply for fresh Terms of Reference (ToR) under Ministry's SOP dated 07.07.2021.

List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	26 th Dec., 2023	27 th Dec., 2023	28 th Dec., 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes	Yes
2	Sh. Niranjana Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-	Member	Yes	Yes	Yes

		Rajasthan, 302018				
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171.	Member	Yes	Yes	Yes
4	Shri. Avijit Ghosh (CMD- Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P.P.Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	Yes	Yes	Yes
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	No	No	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	No	No
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Vij Marg Rajinder Nagar, New Delhi – 110060	Member	Yes	Yes	Yes
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi Ind Stage, Mysore-570026, Karnataka	Member	Yes	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice-Chancellor	Sardar Patel University, Mandi H.P. 175001	Member	No	No	No
11	Shri V. K. Soni, Representative of India Meteorological Department	Government of India, Ministry of Earth Sciences, India Meteorological Department, Mausam Bhawan, Lodi Road, New Delhi – 110003	Member	No	No	No
12	Shri Yogesh Kale, Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	No	Yes	Yes

13	Representative of Directorate General of Mines Safety	Directorate General of Mines Safety	Member	Yes	Yes	Yes
14	Shri Rakesh Kumar Jagenia, DIG, MoEF & CC, New Delhi	Wildlife Division, MoEF&CC, Jorbagh, New Delhi-110003.	Special Invitee	-	-	Yes
15	Shri Hemant Singh, AIG (NTCA), MoEF & CC, New Delhi	CGO Complex, New Delhi-110003.	Special Invitee	-	-	Yes
16	Shri Pankaj Verma	3 rd Floor, Vayu Block, Indira ParyawaranBhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes	Yes





File No.: IA-J-11015/3/2023-IA-II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 23/01/2024



To,

M/s VEDANTA LIMITED
 Sesa Ghor, 20 EDC Complex, Patto, Panjim, NORTH GOA, GOA, 403001
 MK.Reddy@vedanta.co.in

Subject: **Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of Bicholim Taluka of North Goa District, Goa - Environmental Clearance (EC) - reg.**

Sir/Madam,

This has reference to the online proposal no. IA/GA/MIN/442593/2023 dated 1.09.2023 for grant of Environmental Clearance (EC) to the project for Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem&Sirigao Villages of Bicholim Taluka of North Goa District, Goa.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A0000GA5507405N
(ii) File No.	IA-J-11015/3/2023-IA-II(NCM)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining
(vii) Name of Project	Block 1- Bicholim Mineral Block for Iron Ore
(ix) Location of Project (District, State)	NORTH GOA, GOA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A, B and C)/

EIA & EMP Reports were submitted to the MoEF&CC for an appraisal by the EAC under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by EAC in the meeting held on 22.09.2023 and 26.12.2023. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.

5. The EAC, After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC in its meeting held during 26th December, 2023 under the provisions of EIA Notification 2006 and its subsequent amendments, **recommended** the proposal for grant of Environmental Clearance (EC) to Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa subject to the following certain specific conditions in addition to the standard EC conditions applicable for non-coal mining projects (Annexure 1).

6. The matter was examined in the EAC in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and the undersigned is directed to say that the Ministry of Environment Forest & Climate Change after accepting the recommendation of EAC in its meeting held during 26th December, 2023 hereby accords the Environmental Clearance (EC) to M/s Vedanta Limited for Bicholim Mineral Block- Block 1 (Auction Block) for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa, subject to compliance of the terms & conditions and the environmental safeguards mentioned at Annexure 1.

7. The Ministry reserves the right to stipulate additional conditions, if found necessary.

8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

9. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

10. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.

11. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.

12. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

13. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

14. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental

clearance and attract action under the provisions of Environment (Protection) Act, 1986.

15. The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

16. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

17. This issue with an approval of the Competent Authority.

Copy To

1. **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. **The Secretary**, Department of Mines and Geology, Ground Floor of Institute Menezes Braganza, Government of Goa.
3. **The Director**, Department of Environment and Climate Change (DoE and CC), Government of Goa.
4. **The Secretary**, Department of Forests, Government of Goa, Goa Van Bhavan, Goa.
5. **The Chief Wildlife Warden**, Goa Van Bhavan, Forest Department, Altinho, Panaji Goa. 403001.
6. **The Deputy Director General of Forests (C)**, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore - 560034.
7. **The Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
8. **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
9. **The Member Secretary**, Goa State Pollution Control Board, Nr. Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Goa 403511.
10. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
11. **The District Collector**, North Goa District, Government of Goa.
12. **Guard File.**
13. **PARIVESH Portal.**

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Court Case

S. No	EC Conditions
1.1	The instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022 (MSPL v. State of Goa & Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh Govind Gaonkar & Ors v. Directorate of Mines and Geology & Ors) regarding challenging the state's decision to go ahead with the auction of the mining block.

2. Environment Monitoring & Reporting

S. No	EC Conditions
2.1	The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.

3. Public Hearing Concerns

S. No	EC Conditions
3.1	The budget of Rs 309.3 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.

4. Awareness On Single Use Plastic (Sup)

S. No	EC Conditions
4.1	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

5. Implementation Of Emp

S. No	EC Conditions
5.1	The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 72 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
5.2	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.

6. Cleaner Production

S. No	EC Conditions
6.1	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

7. Permission For Groundwater Withdrawal

S. No	EC Conditions
7.1	NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

8. Training Program

S. No	EC Conditions
8.1	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.

9. Occupational Health Checkup

S. No	EC Conditions
9.1	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.

10. Regrassing

S. No	EC Conditions
10.1	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.

11. Capping

S. No	EC Conditions
11.1	The Hon'ble Supreme Court has imposed a capping on mining of iron ore to 20 MTPA for the entire State of Goa. Accordingly, the Project Proponent shall first obtain the necessary permission from the competent authority with regard to the amount of mineral they can mine per year, before starting its mining operation.

12. Common Boundary

S. No	EC Conditions
12.1	The Project Proponent needs to obtain prior permission from the MoEF&CC for mining in common boundary as and when required.

13. Conveyor Belt

S. No	EC Conditions
13.1	As committed before the EAC, the Project Proponent needs to explore the feasibility for installing conveyor belt system for transportation.

14. Ecology Restoration

S. No	EC Conditions
14.1	The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc., Pisciculture in mine pits will be developed and also the local community will be involved for cage fishing to make it a commercially viable venture.
14.2	The ecology restoration or mine reclamation activities shall be carried out concurrently with mining operations. The Project Proponent shall ensure that the restoration models demonstrated before the EAC shall be developed in association with research institutes like NEERI, Goa University etc.

15. Surface Water Monitoring

S. No	EC Conditions
15.1	Regular monitoring and analysis of discharge water and at upstream and downstream of Bicholim and Asnora river needs to be carried out quarterly through NABL/MoEF&CC accredited laboratory.

16. Green Belt And Plantation

S. No	EC Conditions
16.1	Extensive native fruit bearing plantation shall be carried out in all safety zones with density of 2500 trees/ha.
16.2	The Project Proponent needs to complete the entire peripheral plantation under green belt, safety

S. No	EC Conditions
	barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.

17. Soil Erosion

S. No	EC Conditions
17.1	The waste dump slopes shall be covered with laterite material and then with biodegradable geotextile mats to prevent the soil erosion of the dump slopes so as to facilitate the growth of native species.

18. Air Pollution

S. No	EC Conditions
18.1	The Project Proponent needs to install the permanent water sprinklers along 3.40 km haul road within the ML area and 2.80 km length outside the ML area on either side of the road.
18.2	As committed by the Project Proponent, existing trucks of 10.5 Tonnes shall be replaced with higher capacity trucks of 25 Tonnes in phased manner to reduce traffic load and emissions per tonne/km.
18.3	Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEF&CC. Regular sprinkling shall be done on roads to suppress the dust at the source.
18.4	The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.

19. Wheel Washing

S. No	EC Conditions
19.1	The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine.

20. Underpass

S. No	EC Conditions
20.1	The Project Proponent needs to speed up the process of construction of underpass.

21. Settling Pond

S. No	EC Conditions
21.1	The Project Proponent needs to strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge.
21.2	The catch drains and siltation ponds needs to be regularly maintained to arrest silt and sediments flow from dumps.

22. Nursery

S. No	EC Conditions
22.1	The Project Proponent needs to develop a nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village) for an area of about 1100 sq.m in consultation with State Forest Department. PP shall develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc.,

23. Crushing/screening

S. No	EC Conditions
23.1	The Project Proponent needs to modify the crushing & screening units within 4 months from the date of issue of this EC.

24. Conservation Of Wildlife

S. No	EC Conditions
24.1	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
24.2	The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
24.3	The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.

25. Continuous Ambient Air Quality Monitoring System (Caaqms)

S. No	EC Conditions
25.1	The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
1.2	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
1.3	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
1.4	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
1.5	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
1.6	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.7	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.8	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2.2	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
3.2	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
3.3	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly

S. No	EC Conditions
	basis.
3.4	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
3.5	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
3.6	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
3.7	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
4.2	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
4.3	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

5. Mining Plan

S. No	EC Conditions
5.1	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
5.2	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

6. Land Reclamation

S. No	EC Conditions
6.1	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
6.2	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
6.3	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
6.4	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

7. Transportation

S. No	EC Conditions
7.1	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
7.2	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

8. Green Belt

S. No	EC Conditions
8.1	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

9.

S. No	EC Conditions
9.1	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
9.2	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State

S. No	EC Conditions
	Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/protected against felling and plantation of such trees should be promoted.

10. Public Hearing And Human Health Issues

S. No	EC Conditions
10.1	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

11. Corporate Environment Responsibility (Cer)

S. No	EC Conditions
11.1	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

12. Miscellaneous

S. No	EC Conditions
12.1	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
12.2	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
12.3	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
12.4	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

S. No	EC Conditions
12.5	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
12.6	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
12.7	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
12.8	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12.9	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
12.10	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Additional EC Conditions

N/A

Annexure 2

Details of the Project

S. No.	Particulars	Details	
a.	Details of the Project	Block 1- Bicholim Mineral Block for Iron Ore	
b.	Latitude and Longitude of the project site	15.5723661773,73.9013208291 15.615004877,73.9525140757	
c.	Land Requirement (in Ha) of the project or activity	Nature of Land involved	
		Area in Ha	
		Non-Forest Land (A)	0

S. No.	Particulars	Details	
		Nature of Land involved	Area in Ha
		Forest Land (B)	0
		Total Land (A+B)	478.5206
d.	Date of Public Consultation	Public consultation for the project was held on	
e.	Rehabilitation and Resettlement (R&R) involvement	NO	
f.	Project Cost (in lacs)	25000	
g.	EMP Cost (in lacs)	72	
h.	Employment Details		

Details of Minerals Products & By-products

Name of the Mineral to be mined	Classification of mineral [Major/Minor]	Production capacity in MTPA	Remarks
Iron Ore	Major	3.0	

Annexure 2**The details of the project**

The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 15°34'20.518"N to 15°36'54.018"N and Longitude: 73°54'4.754"E to 73°57'09.51"E. The mine lease area falls under the Survey of India Toposheet No: D43B14 and falls in Seismic Zone-II.
- iii. The proposal was earlier considered in the 20th EAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information and site visit report of the subcommittee. Accordingly, site visit was carried out during 29-31 October, 2023 and then the Project Proponent submitted the information along with compliance of site visit report on 04.12.2023 in Parivesh portal and hence the proposal was considered in the 24th EAC (Non-Coal Mining) meeting held during 26-28 December, 2023.

Based on observation of EAC in its meeting held during 21-22 September, 2023 and observations of sub-committee during site visit (29-31 October, 2023), the project proponent provided the following compliances:-

S . N o	Observation of subcommittee during site visit held during 29-31 October, 2023	Reply by Project Proponent
1	The Project Proponent needs to submit the techno economic feasibility report for laying Over Land Belt Conveyor (OLBC) from the mine lease area to Sarmanas Jetty.	The Project Proponent submitted that transportation route from mine site to jetty currently covers a total distance of 5.48 kms (4.54 dedicated road and 0.94 km MDR-20 Public Road). Based on the present capacity of the tippers, 1205 trips are required per day and the present road network is adequate for the purpose with widening and strengthening of some patches. The preliminary Techno-Economic feasibility study has been undertaken and prima facie it does not look feasible to switchover to OLBC system considering the terrain of the likely route having mounds and low-lying areas, vegetation/forest patches and its likely degradation, accessibility, environmental impacts and safety issues, technologies available, cost of the system, implementation period via-a-vis remaining reserves in the mining lease.

		The Project Proponent also submitted the preliminary Techno-Economic feasibility issues for laying Over Land Belt Conveyor (OLBC) from the mine lease area to the Sarmanas Jetty along with cost and timeline comparison for conveyor system and dedicated road.
2	The subcommittee asked the Project Proponent to submit the ecology restoration plan for mined out pits for using as Water reservoir/Pisci culture.	The Project Proponent submitted that the Ecology Restoration or Mine Reclamation activities at Block I Bicholim Mineral block will be carried out concurrently with mining operations. The company has in-house experienced team having experience of mine land reclamation. The company also proposes to collaborate and take support of various reputed institutes and consultancy firms in ecology restoration of the area more importantly the local stake holders will be consulted in the process of ecology restoration. The Project Proponent also submitted that at conceptual stage, 20 ha area will be converted into water reservoir & 293.5 ha will be converted into backfilled area. Backfilled area will be reclaimed & rehabilitated by the plantation. At conceptual stage around 105 ha (21.94% of the total project area) of land will be brought under plantation. The plantation will comprise of saplings of native species which are generally grown in the state of Goa. The plantation would be a mix of various forest and fruit tree species and technical advice would be taken from state forest and agriculture departments. The saplings will be procured from various nurseries like forest department nursery, nurseries developed by locals and also from companies in-house root trainer nursery. Further, the Project Proponent submitted that the Block-I Bicholim Mineral Block is already having a 7.5m wide green belt all along the mine block boundary except the areas where the mine block shares a common boundary with adjoining mine block. A 50m green belt exists towards the habitation within the lease and the same would be further strengthened and maintained. A dedicated 200m green belt would be developed and maintained towards the Idgah area. A density of 2500 saplings per ha will be maintained. Extensive plantation would also be done along the sides of connecting roads. The waste dump slopes will be covered with laterite material and then with biodegradable geotextile mats which will prevent soil erosion of the dump slopes and thus will facilitate the growth of native species. Grass seeds will be sprinkled on the dump slopes so that the same germinate during rains. The top of dump areas / levelled areas will be properly planned and developed in to theme based gardens which can be a attraction for school students, tourist etc.

		Some of the mined-out pits will partially backfilled and retained as water bodies. For instance, 1 Top pit and 5 Bottom pits will be finalized by end of first mine plan period and will be taken up for ecology restoration initiatives. The company will collaborate with state fisheries department to develop Pisciculture in the water body developed in the mine pits. Local youth will be provided training through the fisheries department so that they manage and maintain the Pisciculture project.
3	The subcommittee noted that the transfer of material from one pit to other working pit will lead to transportation issues. The subcommittee asked the Project Proponent to identify the shortest lead distance and also to explore the possibility of concurrent backfilling. The Project Proponent also needs to submit the sequential stage wise mining in top and bottom working pits and their backfilling plan.	The Project Proponent submitted that as suggested by the Hon'ble Committee detailed study of mineral transportation from one pit to another pit including sequential mining has been carried out. The company has explored the possibility of concurrent backfilling and it will be possible only from 5th to 10th year. The Project Proponent submitted the google image showing the existing available pits for backfilling and proposed pits for backfilling. The Project Proponent also submitted the details of existing pits, area, depth and volume for backfilling and also the proposed working pits, area, depth and volume available for backfilling. Further, the Project Proponent submitted the year wise sequential mining & backfilling plan.
4	The Project Proponent needs to submit the action plan for strengthen the settling pond with proper	The Project Proponent submitted that at conceptual stage, total 12 no.s of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds.

	stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge. The action plan for monitoring the water level and water quality before discharge needs to be submitted.	The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M3 of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M3. Further, the Project Proponent submitted that entire monsoon runoff is channelized into mine pits and supernatant water flows into series of settling ponds through drains. The clear water is allowed to naturally overflow by Header arrangements or through check dams. In case required, Lime or combination of Lime and flocculent is used in the mine pit or settling pond so that the particles settle, and clear water is discharged. The discharge water is monitored regularly so that water quality meets the prescribed limits. The inhouse Environment management cell will undertake the regular monitoring and analysis of discharge water through Environment laboratory recognized by MoEF&CC. The monitoring reports will be submitted to Goa State Pollution Control Board on monthly basis and MoEF&CC Regional office on six monthly basis. Surface water samples shall be collected at 8 locations which include all the mine discharge points and upstream and downstream of Bicholim and Asnora river. Samples shall be collected once a month. The parameters listed in IS: 2296 shall be monitored. During monsoon season, in addition to the monthly monitoring, all the discharge points will be regularly monitored (on all the rainy days) and the TSS levels will be checked.
5	The design of garland drain around the waste dumps to divert the water to settling ponds and the measures to be taken to arrest the suspended solids needs to be submitted.	The Project Proponent submitted that the dimensions of the drains will be maintained with width of 2m and 1.5 m in depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get overflowed from the drains. The available garland drains are 11313 m in length which covers all the dumps within the mine lease area. The same will be strengthened and maintained before the onset of monsoon. The daily average surface run-off is estimated as 14003 m³. The garland drains have the capacity to accommodate instant volume of 33939 m³ as per above dimensions. Therefore, garland drains capacity is more than sufficient to take care of average daily surface run off during raining period. Additional drains are proposed to take

	The measures to be taken for preventing the soil erosion on slope of waste dumps needs to be submitted.	care of peak run off during the plan period. Therefore, water management structures comprising of drains, settling ponds and mined out pits are available as well as planned to address the catchment area run-off for conceptual period. The Project Proponent also submitted the measures to be taken to arrest the suspended solids and for preventing the soil erosion on slopes of waste dumps for preventing the soil erosion on slope of waste dumps which are as follows: - Inward slope will be provided to all the dump benches so that the water doesn't flow over the slope and erodes the dump slope surface - Covering the finalised dump slope with lateritic material and then covering with coir geotextiles - Use of ERW pipes between benches to channelise the surface runoff water and diverting to settling ponds. - Boulder walls 1.5m ht and 2m wide will be provided at the toe of the dump to arrest the flow of silt. - Garland drains around the dump is constructed 1m bottom width, 2m top width and 1m deep with a length of 6100 m to divert water to settling pond for arresting the suspended solids. - Use of Stylo grass seeds and Glyricidia cuttings at the onset of monsoon to create green cover on the dump slopes. - Annual Plantation of native species on waste dump. - Safety green belt /barrier of 50 mts shall be maintained near the Assonora river from the mine pit. - Annual de-siltation of the settling ponds, drains. - Use of lime and flocculants in case required so as to settle the suspended solids in settling pond.																		
6	The Project Proponent needs to submit the action plan for installing permanent water sprinklers.	The Project Proponent submitted that permanent water sprinklers with 3.40 km length along the haul road within the ML area and 2.80 km length outside the ML area on either side of the road will be installed. Sprinklers will be spaced at 12m distance covering 6m radius at 180 degree. Estimated budget for the installation of the same is Rs. 191.60 Lakhs. <table border="1"> <thead> <tr> <th>S. No</th><th>Description</th><th>Cost (Rs. In Lakh)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Civil Works</td><td>20.0</td></tr> <tr> <td>2</td><td>Pump & Sprinkler System</td><td>88.0</td></tr> <tr> <td>3</td><td>Pipeline</td><td>75.60</td></tr> <tr> <td>4</td><td>Electrical Works</td><td>8.0</td></tr> <tr> <td colspan="2">Total</td><td>191.60</td></tr> </tbody> </table> The Project Proponent also submitted the map showing the layout of proposed water sprinklers within mine lease area and along dedicated road.	S. No	Description	Cost (Rs. In Lakh)	1	Civil Works	20.0	2	Pump & Sprinkler System	88.0	3	Pipeline	75.60	4	Electrical Works	8.0	Total		191.60
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7	The Project Proponent needs to	The Project Proponent submitted that Crushing & screening units will be modified within 4 months after obtaining the Clearances. Budget proposed for the same is Rs. 6.97																		

	submit the action plan and timeline to modify the crushing and screening units. The Project Proponent also needs to submit the material flow sheet and material balance.	Crore. The Project Proponent also submitted the flow Sheet of Crushing & Screening Unit.
8	The Project Proponent needs to submit the action plan for developing their own nursery by mentioning the details of the area to be covered, species to be planted and budget proposed. Most of the standing vegetation in the lease area constitutes of Acacia auriculiformis and Casuarina equisetifolia and it is further invading the open areas through natural regeneration. The invasion may be checked through planting native	The Project Proponent submitted that it is proposed to develop nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village). Around 1100 sq.m of area will be utilized for the nursery. A budget of Rs. 5 lakh is kept for the same. The nursery will comprise of following: - A poly house/ nursery shed will be developed where in a root trainer nursery will be established. - Production area wherein various jobs like filling of root trainers/polybags will be undertaken store room wherein the nursery equipment's will be stored - Only native / local species of various horticultural and forest species will be grown in inhouse nursery or sourced from forest department nursery for planting in the finalised areas within the Mineral block. - Necessary technical support will be taken from state forest department. Company also carries out collaborative mine reclamation projects in association with research institutes like NEERI, Goa university etc. - Horticultural species like Mango, Cashew, Ber, Aonla, Jambul, Tamarind, Jackfruit, citrus species, etc will be grown - Forest species like various Terminalia tomentosa, Terminalia bellerica, Bauhinia species, Teak, Cassia fistula, Arjun, Assan, Lagerstromia species, Shiwan, Ficus species, Pongamiapinnata, Reetha, Rain tree, Pangara, Peltoforum, Palas, Saton, Mahagony, bamboo species etc. The Project Proponent also submitted that during plan period an area of 9.7288 ha (24,322 no. of plants) will be developed under 7.5m safety zone, Buffer towards habitation, archaeological site, & river and an area of 9.4435 ha (23,609 no. of plants) will be developed on backfilled area. A budget of Rs 28.83 Lakhs has been earmarked towards the same.

	species in the region.																																											
9	The Project Proponent needs to ensure that whether any other Schedule-I species has been added as per latest Wildlife (Protection) Amendment Act 2022 or not. Accordingly, the Project Proponent shall submit the revised authenticated Schedule-I species. The Project Proponent also needs to submit the breakup of the conservation activities proposed under Wildlife Conservation Plan.	The Project Proponent submitted that the authenticated list of Schedule I Species as per Indian Wildlife Protection Act 1972 as amended Gazette Notification of Wildlife (Protection) Amendment Act, 2022 has been obtained from the Dy. Conservator of Forests Wildlife & Eco-Tourism (North), Panji-Goa vide letter no. 1-576-WL&ET(N)/2023-2024/3312, dated 27.11.2023. According to this authenticated list, 29 Schedule I Species have been recorded within 10 km study area. As suggested by the Hon'ble EAC the company revised the break-up of conservation activities proposed under Wildlife Conservation Plan and same will be finalized after discussion with the Forest Dept. The break-up of the conservation activities proposed under Wildlife Conservation Plan are as follows:- <table><tr><th>S.No</th><th>Particulars</th><th>1st year</th><th>2nd year</th><th>3rd year</th><th>4th year</th><th>5th year</th></tr><tr><td>1</td><td>Enrichment of forest areas with suitable indigenous species for wild life habitat improvement</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>Creation/ maintenance of habitat for herbivores/ avian fauna</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>Management interventions for facilitating water availability to the wild life in forest areas/ Improvement of soil and water regime of forest areas</td><td>12</td><td>12</td><td>12</td><td>12</td><td>12</td></tr><tr><td>4</td><td>Financial support to the department for conducting awareness campaigns for various stakeholders</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td>Financial support to the department for celebrating events like Wildlife week</td><td></td><td></td><td></td><td></td><td></td></tr></table>	S.No	Particulars	1 st year	2 nd year	3 rd year	4 th year	5 th year	1	Enrichment of forest areas with suitable indigenous species for wild life habitat improvement						2	Creation/ maintenance of habitat for herbivores/ avian fauna						3	Management interventions for facilitating water availability to the wild life in forest areas/ Improvement of soil and water regime of forest areas	12	12	12	12	12	4	Financial support to the department for conducting awareness campaigns for various stakeholders						5	Financial support to the department for celebrating events like Wildlife week					
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			and sponsoring the prizes for the competitions					
			Total	Rs 60.0 Lakhs				
10	The Project Proponent needs to submit the map demarcating the surface features in the mine lease area and their safety distances left/maintained as per mines acts and rules.	The Project Proponent submitted the map demarcating the surface features in the mine lease area. The Project Proponent also submitted the safety distances left/maintained as per mines acts and rules as given below in table:						
		S.No	Features inside lease	Distance from Ultimate Pit Limit (UPL)	Statutory Distances as per MMR			
		1	ManasbagMulgao village	120 m	45 m			
		2	Mulgao village	58 m				
		3	Lamgao village	56 m				
		4	Manaswada Govt. School within habitation	138 m (12 Students)	45 m			
		5	Gaonkarwada Govt. School within habitation	190 m (not functional)				
		6	Old Lairai Temple	126m (From 5 Bottom Backfilling site)	45 m			
		7	Mahadev&Sateri Temple	280 m				
		8	Kelbai Temple	205 m				
		9	Sateri Temple	130 m				
		10	Matrai Temple	150 m				
		11	Nimuzgah	210 m				
		12	Lamgao Caves	300 m	45 m			
11	The Project Proponent needs to provide proper treatment of channels and nallas flowing in the lease area for soil and water conservation. Scientifically designed and placed check dams and other engineering	The Project Proponent submitted that Silt load study was carried out through Center for Advance studies department of geology, University of Delhi and it was concluded that, all the structures made for the settling of sediments are found to be more than sufficient to accommodate sediments even during peak rainfall. The Project Proponent submitted that the - Total length of the Garland drain = 11313 m - Peak rainfall = 154 mm/day - Peak runoff in a day = 110590 m3 - Capacity of garland drain = 33939 m3. The garland drains are made such that from upstream to the downstream where the drains are meeting the settling ponds will show decrease in elevation, to maintain a free-flowing gradient of rainfall runoff. The dimension of the drains is maintained to be 2m in width and 1.5m in depth at everywhere in the mine site. A proper height has been maintained on the						

	structures at different places can help control the erosion and loss of productive soil. Necessary study from competent institution/individuals may be done for this purpose.	sides of the garland drain so that water don't get over-flooded from the drain.																																																															
S . N o	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by Project Proponent																																																															
1	The site visit report of the subcommittee.	The Project Proponent submitted the observations to the subcommittee recommendations during the site visit 29-31Oct., 2023 are complied and submitted in Parivesh portal.																																																															
2	The Project Proponent needs to revisit the plan for backfilling with clearly indicating the voids area and the capacity available/required for backfilling.	The Project Proponent submitted that 5 numbers of earlier mined out pits have been identified for backfilling purpose to accommodate waste to be generated in future besides additional pits to be made available progressively with mining till conceptual period. The physical details of available pits to be converted into backfilled areas are as follows: <table><tr><th>Mine pit location/ ID</th><th>Total area of pit (ha)</th><th>Area Available for Backfilling (Ha)</th><th>Depth (m)</th><th>Top RL (m)</th><th>Bottom RL (m)</th><th>Vol (m³)</th></tr><tr><td>1 Top</td><td>22.4367</td><td>20.9942</td><td>99</td><td>62</td><td>-37</td><td>19356183</td></tr><tr><td>2 Top</td><td>13.0803</td><td>9.9465</td><td>60</td><td>60</td><td>0</td><td>2968920</td></tr><tr><td>3 Top</td><td>16.0596</td><td>13.1650</td><td>70</td><td>110</td><td>40</td><td>2240000</td></tr><tr><td>¾ Bottom</td><td>-</td><td>-</td><td>109</td><td>102</td><td>-7</td><td>-</td></tr><tr><td>5 Top</td><td>37.0242</td><td>35.7242</td><td>78</td><td>98</td><td>50</td><td>14213124</td></tr><tr><td>5 Top CB</td><td>-</td><td>-</td><td>77</td><td>124</td><td>47</td><td>-</td></tr><tr><td>5 Bottom</td><td>15.4196</td><td>12.0840</td><td>92</td><td>87</td><td>-5</td><td>7035240</td></tr><tr><td>Total</td><td>104.0204</td><td>91.9139</td><td></td><td></td><td></td><td>45813467</td></tr></table>	Mine pit location/ ID	Total area of pit (ha)	Area Available for Backfilling (Ha)	Depth (m)	Top RL (m)	Bottom RL (m)	Vol (m³)	1 Top	22.4367	20.9942	99	62	-37	19356183	2 Top	13.0803	9.9465	60	60	0	2968920	3 Top	16.0596	13.1650	70	110	40	2240000	¾ Bottom	-	-	109	102	-7	-	5 Top	37.0242	35.7242	78	98	50	14213124	5 Top CB	-	-	77	124	47	-	5 Bottom	15.4196	12.0840	92	87	-5	7035240	Total	104.0204	91.9139				45813467
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Further, the details of pits to be made available progressively with mining till conceptual period and converted into backfilled areas are as follows:							
Mine pit location/ ID	Total area of pit (ha)	Area Available for Backfilling (Ha)	Depth (m)	Top RL (m)	Bottom RL (m)	Vol (m ³)	Void availability for backfilling
2 Top	43.1944	39.2331	116	91	-25	10518996	5 th year
³ / ₄ Bottom	39.4606	34.6140	169	102	-67	15412643	End of 3 rd year
2 Top	68.52	65.6420	113	103	-10	47912000	6 th to 10 th year
3 Top/2 Top combined	38.2545	36.6500	118	108	-10	38161200	11 th to 13 th year
4 Top/3 Top Combined	-	-	84	73	-11	-	11 th to 13 th year
5 Top CB Pit	-	-	168	94	-74	-	11 th to 13 th year
Total	189.425	176.1391				112004839	
As shown in the above tables, five numbers of earlier worked out pits will have void volume of 45.81 million m³ and during the Plan & Conceptual period progressive excavation, 112 million m³ of void volume will be available for backfilling. Therefore, a total of 157.98 million M³ of void volume will be available for backfilling in mined out pits having a cumulative area of 268.05 Ha. Additionally, area of 62 Ha will be available as voids including 22 ha of water reservoir for storing rain water. The Project Proponent also submitted that the Conceptual waste generation shall be 124.9 million Cum which will have a swelled volume of 149.90 million CuM (say 150 million CuM). The 0.2 million CuM of swelled waste will be dumped over top of backfilled pits as surface dumps. Sufficient space is							

		available to accommodate waste generated during life of mine considering swell factor of 1.2. Annual waste generation is in range of 4.35 to 12.58 million cum per year with an average of 9.61 million cum per year considering life of the mine as 13 years based on the presently available mineable reserves. Life of the mine may reach upto 30 years if entire resources are converted to reserves by removing all encumbrances.														
3	The Project Proponent needs to submit the design of settling ponds by considering the annual rainfall, catchment area and its discharge.	The Project Proponent submitted that at conceptual stage, total 12 no.s of settling ponds will be developed and these will be strengthened by the stone pitching. About 6 numbers of earlier mined out abandoned pits and 12 nos of interlinked siltation ponds have been identified for collecting surface run off from respective catchment sub basins. The Project Proponent also submitted the map showing the settling ponds and drainage network and design of settling ponds. The Project Proponent submitted that a total of 5.49 Million CuM of void volume is available for surface run-off holding in six pits having a cumulative area of 58.11 Ha which have a total catchment area of 160 Ha. During entire mine life water holding capacity of 5.49 or more than 5.49 Million CuM will be available at any time. Further, a total 12 nos of settling ponds have been earmarked within and outside the ML Area for collecting surface run off. A total of 0.38 Million M3 of void volume is available for surface run-off holding in 12 nos settling ponds having a cumulative area of 8.84 Ha. Considering five fillings in a year, the gross volumes of settling ponds will be 1.90 Million M3. <table><tr><th>Particulars</th><th>Details</th></tr><tr><td>Catchment area of pits</td><td>160 ha</td></tr><tr><td>Rainfall received</td><td>160 ha x 3500 mm = 5.6 Million CuM</td></tr><tr><td>Effective surface runoff to be accumulated in voids</td><td>5.6 x 0.7 = 3.92 Million CuM</td></tr><tr><td>Pits water holding capacity</td><td>5.49 Million CuM</td></tr><tr><td>Gross settling ponds capacity</td><td>1.90 Million CuM</td></tr><tr><td>Total water holding capacity of mined pits and settling ponds</td><td>7.39 Million CuM</td></tr></table> Further, the Project Proponent submitted that since total water holding capacity in pits and settling ponds (7.39 Million CuM) is more than rainfall and surface runoff volume from catchment (3.92 Million CuM), there is sufficient space for effective surface runoff management in during extreme precipitation times. The dimensions of the drains to be maintained will be 2m in width and 1.5 m in depth everywhere in the mine. A proper height will be maintained on the sides of the garland drain so that water does not get over-flooded from the drains. The available garland drains are 11313 m in length and daily average surface run-off is estimated as 14003 m3. The	Particulars	Details	Catchment area of pits	160 ha	Rainfall received	160 ha x 3500 mm = 5.6 Million CuM	Effective surface runoff to be accumulated in voids	5.6 x 0.7 = 3.92 Million CuM	Pits water holding capacity	5.49 Million CuM	Gross settling ponds capacity	1.90 Million CuM	Total water holding capacity of mined pits and settling ponds	7.39 Million CuM
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4	The Project Proponent needs to bypass the public road and also to explore the possibility of increasing the capacity of the truck so as to reduce the no. of trips. The EAC opined that the Project Proponent needs to revisit the traffic load by considering the cycle time and waiting time. The Project Proponent needs to submit the action plan for strengthening the road and for converting the unpaved road into concrete road.	The Project Proponent submitted the map showing the transportation route comprising of dedicated road corridor and public road. The total travel distance upto Jetty is 5.48 kms (4.54 km dedicated road and 0.94 km MDR-20 Public Road).Traffic load and effective distance between two trucks are as follows:- <table><tr><th>S.No</th><th>Transportation working days</th><th>Quantity (In TPA)</th><th>Tonnes / Day</th><th>Trips per day</th><th>Mode of transport</th></tr><tr><td>1</td><td>237</td><td>30,00,000</td><td>12658</td><td>1205</td><td>Road</td></tr><tr><td colspan="4">Total Trips per day</td><td>1205</td><td></td></tr></table> The Road width details for various segments are as follows: <table><tr><th colspan="2">Dedicated Road corridor</th><th>Public Road</th></tr><tr><td>3.31 km</td><td>1.23 km</td><td>0.94 km</td></tr><tr><td>12-15 mts wide Road</td><td>7 mts wide Road</td><td>7 mts wide Road</td></tr></table> Further, the Project Proponent submitted the following details:- i. Capacity of truck is 10.5 tons as per directives of Deptt. of Mines & Geology, Goa ii. Total Handling per day is 12658 tons /day iii. Transportation timings are 6.00 am to 7.00 am, 8:00 am to 12.45 pm and 2:00 pm to 5.45 pm. Therefore, the effective transportation time is 9.30 hrs. iv. Per Hour Handling is: 1332 tons/hour v. No. of Vehicles per Hour (One way): 127 vehicles vi. No. of Vehicles per Hour (to and fro): 254 vehicles vii. The Speed of vehicle is 25 KMPH and the lead distance is 5.48 kms viii. The time taken for 5.48 km is 13.15 mins for each truck and loading time is 1min, weighment time at both source location is 2 min, Tarpaulin tying and untying	S.No	Transportation working days	Quantity (In TPA)	Tonnes / Day	Trips per day	Mode of transport	1	237	30,00,000	12658	1205	Road	Total Trips per day				1205		Dedicated Road corridor		Public Road	3.31 km	1.23 km	0.94 km	12-15 mts wide Road	7 mts wide Road	7 mts wide Road
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	time is 2 min, unloading time 1 min and waiting time 10 min. ix. Each truck length is 15'. 5" (4.58 m) x. Distance from truck to truck is 5 m both side = 10 m xi. Each vehicle occupies a min. distance of 14.58 m = ~ 15 m xii. The length of road is 5.48 Km = 5480 m xiii. No. of vehicle which can travel on this road for one side= $5480 / 15 = 365$, However we would be plying only 127 trucks hence effective distance between two vehicles is 43 m. The Project Proponent submitted the following mitigation measures for transportation:- - Public road is hot mixed and same will be maintained. - Dedicated road is proposed to be hot mixed in phased manner. - Entire Dedicated transportation route is surrounded by thick Green Belt - Transportation vehicles shall be properly maintained to minimize the exhaust emission. - Regular tests shall be carried out to check exhaust emission and PUC certification of transportation vehicles at prescribed interval. - Transportation trucks will be loaded with prescribed capacity and covered with tarpaulin before leaving mines premises. - Overloading of the material will be avoided. - Regular monitoring of the emission levels. - Over speeding of Vehicle will not be allowed. - Traffic Marshals shall be provided for regulating movement of vehicles as well as for safety of persons. - Training will be given to all drivers about safe driving. - Regular water sprinkling by means five hired water tanker of 10KL capacity on haul road and Loading points will be carried out - Used of fixed dust suppression system on haul roads - Installation of two wheel washed system (one each at the exit of the dedicated road and jetty exit respectively - Manual and mechanised machines for road sweeping - Washing of mine exit points/Junctions (Mayem, Pilgao and Jetty exit area) after transportation hours/at night with water tanker having pipe arrangements - Underpass proposed at Mayem junction to prevent interface with public. The Project Proponent submitted that the regular mining in the state of Goa stopped since 2012 (it started for brief period in 2018 and again stopped). The truck owners who have already invested in the 10.5 T trucks are severely affected due to the

		stoppage of mining activity and are against procurement of new / high-capacity trucks, till their losses are covered. The company has already conducted series of meetings with the truck owner's associations for the higher capacity trucks and the truck owners are not agreeing to any changes in short term of 5 years. However, the engagement with the truck owners for higher capacity truck will continue. Company will also engage with all stake holders to explore the feasibility for installing conveyor belt system for transportation in near future, if permitted. The public road which is used for transportation is only 0.94 km long and the same is a hot mix road and in well maintained condition. The dedicated road of 4.54 km has very thick green belt on both the sides. There is no habitation along the dedicated road. Nearest habitation will be more than 250m from the road. The dedicated road before joining the public road is concreted and provided with the wheel wash system. Dedicated road sweeping machine will also be deployed to maintain the public road clean. The company also undertakes to hotmix the stretch of 4.54 km of dedicated road in a phased manner in three years' time frame. The estimated cost towards hot mixing is worked out as INR 18 crores.
5	Since the mine lease area is sharing the Mayem Forest common boundary, the Project Proponent needs to submit the letter from the State Forest Department regarding the involvement of forest land in the mine lease area.	The Project Proponent submitted the letter from the Office of the Dy. Conservator of Forests, North Goa Division Sensitivity: Public (C4) vide letter no. 5/MINES-GEN/DCFN/TECH/2023-24/56, dated 12.04.2023 stating that the detail of village wise Survey No.s within Block-1 of Bicholim Mineral block was verified and found that the area under the above mentioned Survey Nos is not a Govt. Forest and also does not identified as Private Forest by State Level Expert Committee headed by Sawan/Dr. Karapurkar/V.T. Thomas.
6	The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Goa clarifying	The Project Proponent submitted the letter from the Directorate of Mines & Geology vide Lr. No. 03/24/2023/Major/Mines/Part/489 dated 25.07.2023 stating that - M/s. Vedanta has been declared as Preferred Bidder for Bicholim Mineral Block- Block I through an auction process conducted by the Government of Goa as per the Mineral Auction Rules, 2015. - M/s. Vedanta Ltd., was not the erstwhile lessee of the said Block prior to auction.

	whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Vedanta Limited or not?	c) The matter of illegal mining in the State of Goa is under investigation by the Special Investigation Team (SIT). The Project Proponent also submitted that the Block-I Bicholim Mineral Block was earlier operated by Sesa Mining Corporation Ltd. (SMCL) formerly known as Dempo Mining Corporation Ltd. Pursuant to Supreme Court Judgment in Goa Foundation order dated 07.02.2018, all the mining leases granted by the State Govt. were cancelled. Thereafter, State Govt. in terms of the said order and as per the provisions of MMDR Act put this block for auction as a fresh lease grant. The e-auction process was conducted in accordance with the Tender Document for said Mineral Block. Vedanta Limited emerged as the highest qualified bidder having submitted the highest final price offer and was declared as the preferred bidder under Rule 9(9) (iii) of auction Rules. Further, upon submission of the first Installment, being 20% of the upfront payment, Government of Goa issued a Letter of Intent (LOI) vide letter no. DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for the grant of a mining lease for Block-I Bicholim Mineral Block in Bicholim, Bordem, Lamgao, Mulgao, Mayem&Sirigao Villages, of Bicholim Taluka, North Goa District, Goa State over an area of 478.5206 Ha over a period of 50 years.
7	The Project Proponent needs to submit the video recording of the public hearing.	The Project Proponent submitted that Goa State Pollution Control Board vide their letter No. 11/15/2023-PCB/Leg/13555 dated 22/09/2023 submitted all the documents related to public hearing including public hearing video to the Member Secretary, EAC (Non Coal Mining).

iv. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
16.03.2023	F.No: IA-J-11015/3/2023-IA-II(NCM) IA/GA/MIN/422323/2023	3-4 May, 2023	Terms of Reference (ToR) to M/s Vedanta Limited for mining of Iron Ore in Bicholim Mineral Block – Block 1 (Auction Block) with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA (Total Excavation: 28.162 MTPA) along with crushing and screening plant	16.06.2023

			capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located in Bicholim, Bordem, Lamgao, Mulgoa, Mayem & Sirigao Villages of Bicholim Taluka of North Goa District, Goa	

v. Details of Mine Lease:

- a) The Project Proponent has submitted the Letter of Intent (LoI) granted by the Government of Goa vide Lr No: DMG/25/Auction Cell/LOI-function/2023/2801 dated 13.01.2023 for grant of mining lease for Block I - Bicholim Mineral Block for Iron Ore in Bicholim, Bordem, Lamgao, Mulgoa Mayem & Sirigao villages, Bicholim Taluka, North Goa District over an area of 478.5206 Hectare for a period of 50 (fifty) years in pursuant to Rule 10(2) of the Auction Rules. This letter of intent is valid for a period of 3 (three) years from the date of its issuance.

vi. Land Use/Land Cover of the Mine Lease Area:

Private land	421.1153 Ha
Government land	57.4053 Ha
Total Mining lease area (MLA)	478.5206 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Not Applicable

vii. Details of Mining Plan:

Review and Mining Plan approved by Indian Bureau of Mines, Goa	Letter No.	No. MCDR-MPC 1 2023-GOA-IBM_ RO_ GOA
	Date	26.05.2023
	Mine Lease Area	478.5206 Ha
	Mineral	Iron Ore (Major Mineral)
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining without Drilling & Blasting	
Drilling/Blasting	Not Applicable	
Total Reserves and Resources	84.73 Million Tonnes	
Proved Mineral Reserve	36.071 Million Tonnes	
Life of mine	30 years	
Bench Height	7 m	

Bench Width	10 m
Individual bench slope	70°
Overall pit slope	<26°
RoM output size	Less than 500 mm
Crushing/Screening	Mobile Dry Crushing and Screening plant shall be available within the proposed mine to handle 4 MTPA of crude ore. The primary crusher will consist of 1 no. of Jaw crusher of capacity 120 TPH with an input feed of -500mm and shall produce output of -70 mm. It shall be followed by secondary crushers, 2 no.s of capacity 300 TPH and 200 TPH respectively. The input feed size shall be -70mm and output feed size obtained shall be -40mm. The Screening Plants of capacity -600TPH shall be installed where input the feed size shall be -70mm to obtain product of -40mm lumps & -10mm fines.
Transportation details	ROM/Iron ore or Screened/crushed material will be transported by 10.5 Tonne trippers from Mine to Sarmanas jetty through a dedicated road. The total distance from the mine to Jetty is 5.58 km of which 0.94 km stretch is public road and remaining 4.64 km is company owned dedicated road.
Dumpers capacity	40 tonne (within mines)
Waste handling and Disposal	During the mining period, the waste generated by mining will be temporarily stacked within the mining lease area as surface dump and backfilled in the exhausted portion of the pits. The total waste to be generated during the plan period is about 69.85 million tonnes. An area of 6.7146 Ha shall be utilized for Dumps and Material stocking at the conceptual stage of mining.

viii. Water requirement:

Total water requirement	664 KLD	Pit Water	628 KLD
		Ground water	36 KLD
Source	Water from Mine Pit will be used for dust suppression, Vehicle washing and Green belt. Water for domestic requirement will be met from bore well.		
Permission	The Bore wells are registered with Goa State Water Resource department. Application for using mine pit water will be submitted.		

ix. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Directions
Village	Lamgoa	Within the lease area
Town	Bicholim Town	0.5 km, East
Road	State Highway SH-1	0.65 km, East
Railway Station	Tivim Railwaystation	10.5 km, North
Water Bodies	Asnora River	Touching lease boundary at one of the points
	Mayem Lake	0.46 km
	Mandovi River	2.3 km, SW
School	Mulgao Govt. Primary School	Within the lease area
Worship places	Namuzgah/Idgah Shri Lairae Temple	Within the lease area 0.86 km
Caves/Fort	300m buffer from Lamgao caves Khorjuvem Fort: 2 km	

x. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	Yes	Mayem Forest Common Boundary with the mine lease area The following Reserve Forests are located within 10 km radius of the mine lease area such as Kharapal RF -6.7 km Kasarpal RF - 5.1 km Ambadgaon RF - 7.6 km
National park	No	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: DCF(WP)/Tech/Digi/Vol-I/75/2022-23/ 968 dated 23.01.2023 stating that the proposed Bicholim Mineral Block-I is not situated within 10 km radius from the boundary of any the protected area in the State of Goa. PP also submitted the authenticated map dated 24.01.2023 showing the distance of the following Wildlife Sanctuary from the mine lease area. i. Madei Wild life Sanctury-14.105 km, E ii. Salim Ali Bird Sanctuary -10.553 km, SW iii. Bondla Wild life Sanctuary -20.476 km, SE
Schedule-I species	Yes	The Project Proponent has submitted the letter from the Office of the Dy. Conservator of Forests vide Lr No: 5/FCA/GEN/F&F/DCFN/TECH/2022-23 dated 04.04.2023 with regard to list of Flora and Fauna species present in core and buffer zone.

		The following Schedule-I species are found in the study area such as 1 Common leopard (<i>Felidae</i>) 2 White-bellied Sea-Eagle(<i>Accipitridae</i>) 3 Indian Peafowl (<i>Phasianidae</i>) 4 Crimson rose- Butterfly (<i>Papilionidae</i>)
Status of Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is prepared and submitted for approval of Chief Wildlife Warden (CWLW) on 19.06.2023. PP has submitted the copy of the acknowledgement from Chief Wildlife Warden.

xi. Green belt/plantation details:

Proposed area for green belt/plantation	105.8894 ha
Budget for green plant& plantation till the end of life of mine.	Rs159.0Lakhs
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	25 ha
50 m safety zone of nallah, roads, electric lines	
Additional information (if any)	80.8894 ha (on backfilled area)

xii. Details of Baseline data:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	March, 2023 to May, 2023		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season		
Ambient Air Quality (no. of locations) and results	No. of Locations	Parameters	Results
	9	PM10	27.0 to 56.0 $\mu\text{g}/\text{m}^3$
		PM2.5	14.0 to 36.0 $\mu\text{g}/\text{m}^3$
		SO2	4.0 to 13.0 $\mu\text{g}/\text{m}^3$
		NO2	<4.0 to 18.0 $\mu\text{g}/\text{m}^3$
Noise level (no. of locations) and results	No. of Locations	Parameters	Results
	09	During Day Time [Leq dB(A)]	43.1 to 61.7
		During Night Time [Leq dB(A)]	35.9 to 49.3

Water Quality (no. of locations) and results	Surface water quality		
	No. of Locations	Parameters	Results
	07	pH	6.35 - 7.39
		TDS (mg/l)	72 - 11240
		Fluoride (mg/l)	<0.1
		Chloride (mg/l)	18 - 5620
		Fe (mg/l)	<0.05
		Dissolved Oxygen (as O ₂), mg/l	6.2 – 6.9
		Biochemical Oxygen Demand (as O ₂), mg/l	<3.0
		Chemical Oxygen Demand (COD) mg/l	22.0 – 26.0
	Groundwater Quality		
	No. of Locations	Parameters	Results
Soil Quality (no. of locations) and results	10	pH	5.63 – 7.07
		TDS (mg/l)	20 – 150
		Fluoride (mg/l)	0.1
		Chloride (mg/l)	5.0 - 19.0
	07	pH	5.38 to 5.78
		Electrical Conductivity (mohs/cm)	0.28 to 0.318
		Nitrogen (kg/ha)	200 to 275
		Phosphorus (kg/ha)	14.3 to 17.8
		Potassium (kg/ha)	230 to 263

xiii. Public Hearing (PH) Details:

Advertisement for PH with date	07.07.2023 Regional: Bhangar Bhui, Heraldo, Lokmat & Free press journal (Mumbai Edition) News papers
Date of PH	11/08/2023
Venue	Narayan Zantye Multipurpose Sports Complex, Sarvan, Bicholim, Goa
Chaired by	District Collector, North Goa
Main issues raised during PH	Pollution, impact on ponds, Support for Education, Health, Agriculture Development & Skill Development, Employment.
Budget proposed for addressing issues raised during PH	Rs 309.3 Lakhs

xiv. Rehabilitation & Resettlement:

R & R details	There is presence of habitation within ML Area at Mulgao and lamgao villages. Safety Buffer of 50m will be maintained from the habitations. No Rehabilitation & Resettlement Plan is proposed during life of mine.

xv. Court case details:

Court Case	Yes
Additional information (if any)	First Case: 1. WP(Civil) 2478 of 2022 (Filing number) before the High Court of Bombay at Goa 2. The said writ petition has been filed against the State Government and seeks to challenge the identification of properties bearing survey no. 90/1(part) and 96/0 as part of the recently auctioned Bicholim mine. The petition alleges violation of Rule 5 &6 of Mineral Evidence Rules and Section 10B of MMDR, Act by the State of Goa and DMG. The petitioner has prayed for quashing of auction notice to the extend it includes the property of the petitioner and grant a writ of mandamus against the Respondents. 3. Case status is pending. 4. No adverse orders have been passed. 5. As per the last order the matter has been disposed of by the HC on 17th July 2023 with a direction to the Petitioner to make a representation before the Government and the Government is to dispose of the same within four months. Second Case: 1. WP 592 of 2022 The said writ petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. The petition alleges violation of Rule 5 & 6 of Mineral Evidence Rules by the State of Goa and DMG. The petition alleges non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data. The petitioner has prayed for quashing of auction notice to the extend it fails to

	include the essential facts and in the alternative to stay the auction.
	2. Case status is pending
	3. No adverse orders have been passed.
	4. As per the last order the matter is listed on 01.09.2023.

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent has submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: A807037 dated 24.04.2023 stating that they will comply to the directions issued by MoEF&CC vide Office Memorandum F.No.3-50/2017.IA.III (Pt) dated 30th May, 2018 in terms of directions given Hon'ble Supreme Court in judgment dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking of Project Proponent	The Project Proponent has submitted an undertaking stating that the Environmental Impact Assessment Report of Block-1 Bicholim Mineral Block of M/s Vedanta Ltd was prepared by M/s Mineral Engineering Services, QCI/NABET Accredited EIA Consultant at Sr.No. 55 as per list of list of accredited consultant/organizations. The Project Proponent has submitted an undertaking that the information and data provided in the EIA report and submitted to the Ministry are factually correct and they are fully accountable for the same.
Consultant submitted an Undertaking vide letter dated 02.06.2023	This is to declare that the prescribed ToRs have been complied with and that the data submitted are factually correct in respect of EIA & EMP report prepared for Block-1 Bicholim Mineral Block of M/s Vedanta Ltd, Goa.

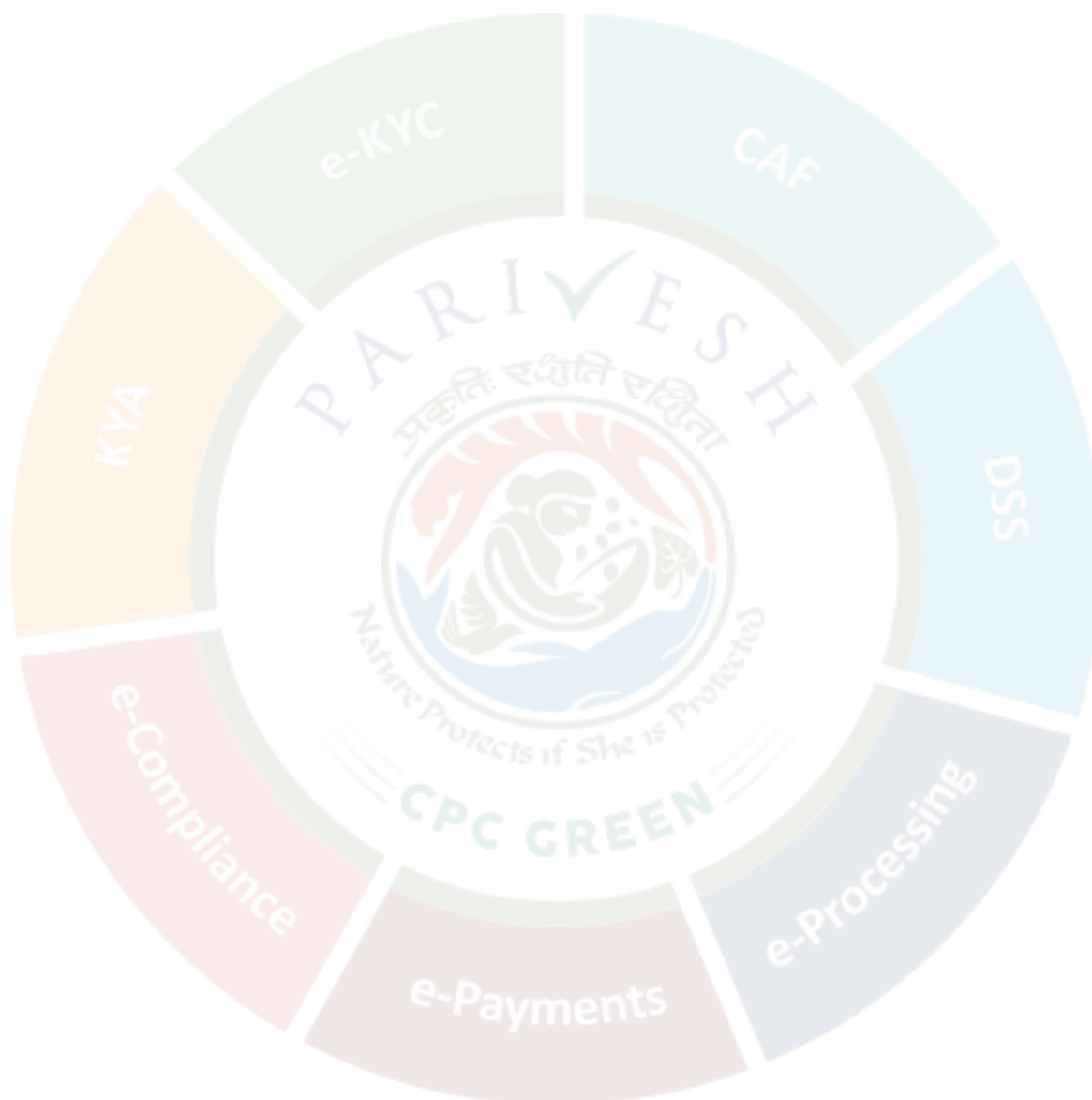
xvii. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Plantation	-	7.5
Environment monitoring	44	44
Air pollution control measures	20	300
Water Treatment	-	11
Erosion control /monsoon measures	-	221
Personal protective equipment	-	15
Maintenance of fire protection systems	-	1.5

Environment awareness & training	-	5
Health	8	16
Total	72	621

xviii. Details of project cost and employment:

Particulars	(Rs. In lakhs)
Project Cost	25000 Lakhs
Employment	716 no.s



Signature Not Verified

Digitally Signed by : Mr Pankaj Verma
Member Secretary, MoEFCC (EC)

Date: 23/01/2024

No. J-11015/200/2008-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.
Telefax: 24362434

Dated the 31st March, 2011

Office Memorandum

Sub: Consideration of projects for grant of environmental clearance under EIA Notification, 2006 which involve forestland – Procedure to be followed – Regarding.

Ref: Office Memorandum no. J-11013/41/2006-IA.II(I) dated 2nd December, 2009 regarding Procedure for consideration of proposals for grant of environmental clearance under EIA Notification, 2006, which involve forestland and or wildlife habitat.

The issue regarding consideration of proposals especially mining project for grant of environmental clearance under EIA Notification, 2006, which also involve diversion of forestland has been under consideration for quite some time and circulars / guidelines have been issued in the past in this regard from time to time. In this regard, reference is also invited to para 8 (v) of the EIA Notification, 2006 reads as follows:

"Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons."

According to the above provision, the environmental clearance under EIA Notification, 2006 is independent of other clearances and submission of clearances under other relevant Acts and Rules as may be applicable to a project is not a pre-requisite for obtaining environmental clearance except in specific cases where it is sequentially dependent on such clearance either due to requirement of law or for necessary technical reason. This aspect was earlier discussed and deliberated and the office memorandum dated 2nd December, 2009 referred to above was an outcome of the same.

However, in view of the complexity of the issues involved, the matter has been considered further in the Ministry and in supersession of the earlier instructions, it has now been decided to adopt the following procedure for consideration of such projects.

I. Projects in Pipeline:

(A) Projects received for TORs and yet to be considered by EAC:

In case of the proposals which have been received for prescribing TORs and involve forestland, in part or in full, and are yet to be considered by the EAC, during consideration of such proposals, clarifications will be obtained from the project proponent regarding feasibility of undertaking the project only in non forestland. In case, the project proponent confirms to undertake the project in non forest area only, the proponent may be advised to submit the revised proposal by deleting the forestland involved in the project. In case, it is not possible to undertake the project without involving diversion of forestland, the project proponent will be asked to first apply for stage-I forestry clearance for the forestland involved in the project and thereafter submit the proposal for obtaining terms of reference as per the procedure prescribed under EIA Notification, 2006.

(B) Projects for which TORs have already been prescribed but the proposal for environmental clearance is yet to be submitted:

In case of the proposals, which involve forestland, in part or in full, and for which TORs have already been prescribed, the project proponents are advised to ensure that the requisite stage-I forestry clearance has been granted and its copy is submitted along with their application / proposal for environment clearance. Alternatively, the proponent should delete from their land requirement, the forestland involved in the project and the proposal so amended without any forestland may be submitted for appraisal by the EAC.

In case of projects where forest diversion (Stage I Clearance) has been approved for part of the total forestland involved in the project, the proposal will be considered only for the land for which forest diversion has been approved and the non forestland, if any. For the purpose, the onus of demonstrating that the project activities will be limited to that much area only would lie with the project proponent and necessary supporting documents will be submitted in this regard.

(C) Projects submitted for environmental clearance based on the TORs prescribed by EAC:

The proposals already submitted for environmental clearance will be appraised by the EAC on their merit and in case of involvement of forestland, the proponent will be asked either to delete the forestland and submit the revised proposal or approach the EAC after the stage-I forestry clearance for

the forestland involved in the project has been granted, till which time the proposal will stand delisted.

In case of projects for which diversion of forestland has been granted for part of the forestland, the proposal will be appraised taking into account that much of land only (land for which FC granted + Non forestland) for the project activities and the proponent should demonstrate the viability of the project with requisite supporting documents.

(D) Projects already considered by EAC and recommended for grant of environmental clearance:

In accordance with the recommendations of EAC, such projects will be processed on file for obtaining approval of the MEF for grant of environment clearance. After MEF has approved, a communication will be sent to the project proponent informing that the Competent Authority has approved the project; however, the formal environmental clearance will be issued only after the stage-I forestry clearance for the forestland involved in the project has been obtained and submitted. For the purpose, a maximum time limit of one year will be provided to the proponent during which time the proposal will be kept in abeyance. In case, the formal forestry clearance is not submitted within this time frame, the proposal will stand rejected and the process for obtaining environmental clearance will have to be initiated, de-novo, as per the procedure prescribed under EIA Notification, 2006.

II. Expansion Projects:

- (i) Mining Projects involving enhancement of production by increasing the depth and or number of shifts, without any increase in lease area and having already obtained the forestry clearance for the forestland involved in the mine lease, shall be considered on merit and decision taken.
- (ii) The Expansion projects involving horizontal spread with additional land requirement will be dealt with as green field projects, if additional forestland is to be diverted.

III. Greenfield Projects:

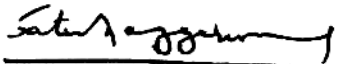
- (i) If any green field project does not envisage any diversion of forest land, it would be considered as per the provisions of EIA Notification, 2006.
- (iii) In case of any green field project, which involves diversion of forest land, the project proponents are advised to re-examine the requirement of forestland and submit the proposal without forestland for consideration of the EAC. Otherwise, the proponent should submit the proposal for TORs under the EIA Notification, 2006 only after

-4-

applying the stage-I forestry clearance for the forestland involved in the project.

- (iii) All cases of grant / renewal of EC for any abandoned mine or sick project under revival etc. would be considered as a green field project for appraisal under EIA Notification, 2006 and the procedure mentioned above will be followed.

This issues with the approval of the Competent Authority.


(Dr. S.K. Aggarwal)
Director

To

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAAs/SEACs

Copy to:-

1. PS to MEF
2. PPS to Secretary (E&F)
3. PPS to SS(JMM)
4. Advisor (NB)
5. Website, MoEF
6. Guard File

F. No. IA3-22/10/2022-IA.III [E 177258]

Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003

Dated: 8th June, 2022

OFFICE MEMORANDUM

Subject: Standardizing the validity of baseline data and public consultation reports for submission of proposal within the validity period of Terms of Reference (ToR) under the provisions of EIA Notification, 2006 - regarding.

As per the provisions of EIA Notification, 2006, Terms of References (ToR) are being accorded to the various developmental projects listed in the schedule to the EIA Notification, 2006 except schedule 8(a) for undertaking EIA/EMP study. In this regard, Ministry issued Office Memorandum No. J-11013/41/2006-IA-II (I) (Part) dated 29th August 2017 stating that the validity period of ToR as three years for all the projects/activities and four years for River Valley and HEP Projects. This validity period could be further extended by a maximum period of one year, thereby making the outer limit for validity of ToR as four years for all projects/activities and five years for River Valley and HEP projects.

2. Further, in the above-mentioned O.M, it is also stated that the baseline data used for preparation of EIA/EMP reports may be collected at any stage, irrespective of the request for ToR or the issue thereof. However, such baseline data and the public consultation should not be older than three years, at the time of submission of the proposal, for grant of Environmental Clearance (EC), as per ToRs prescribed.

3. Thereafter, MoEF&CC also issued a gazette notification vide S.O.751 (E) dated 17/02/2020 stating that the Terms of Reference for the projects or activities except for River valley and Hydro-electric projects, issued by the concerned regulatory authority, shall have the validity of four years from the date of issue. In case of the River valley and Hydro-electric projects, the validity of ToR will be for five years.

4. Instances have been brought to the notice of this Ministry wherein the application for Environment Clearance are being submitted by the project proponent well within the validity period of the ToR but the baseline data is older than three years. In such situation, project proponent is required to start the entire process of baseline data collection *de novo*. Many a times, it is also observed that the delay in submission of EC proposal happens due to delay in rescheduling and conduct of public hearing for reasons beyond the control of project proponent.

5. In many such cases where proposals are submitted with baseline data older than three years, the EAC prescribes for revalidation of data with fresh baseline data of 15 days/1 month/ 1 season on a case to case basis.

6. The aforesaid matter has been examined in the Ministry. In order to address this issue in a practical manner and to bring uniformity in handling such proposals, the following standard procedures shall be followed with immediate effect:

- i. Baseline data used for preparation of EIA/EMP reports may be collected at any stage of the EC process or even before the grant of ToR.
- ii. Public consultation shall be conducted after the grant of ToR. The Public consultation conducted after the expiry of ToR shall not be accepted by the Regulatory Authority.
- iii. The baseline data and Public Hearing shall not be more than three years old at the time of submission of application for consideration of EC.
- iv. At the time of application for EC, in case baseline data is older than three years, but less than five years old in the case of River valley and HEP Projects, or less than four years old in the case of other projects, the same shall be considered, subject to the condition that it is revalidated with one season fresh non-monsoon data collected after three years of the initial baseline data.
- v. In case the proposal for EC along with EIA/EMP reports based on the ToRs prescribed is not submitted within the validity period of ToRs, and/or not complying with the above-mentioned criteria, the concerned Member Secretary shall not accept the proposal and process shall be initiated *de novo* by the PP.

7. This O.M. is issued in supersession of OM no. J-11013/41/2006-IA-II (I) (Part) dated 29th August 2017 and with the approval of the Competent Authority.


(Sundar Ramanathan)
Scientist E

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
5. All the Officers of I.A. Division

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to DGF&SS (EF&CC)
5. PPS to AS(TK)/PPS to JS (SKB)
6. Website, MoEF&CC/Guard file.

Half Yearly Compliance Report 2024

01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Bicholim Mineral Block- Block 1 (Auction Block) of M/s Vedanta Limited for mining of Iron Ore with proposed production capacity of 3.0 MTPA, Waste: 25.162 MTPA(Total Excavation: 28.162 MTPA) along with crushing and screening plant capacity of 4.0 MTPA in the mine lease area of 478.5206 ha, located at Bicholim, Bordem, Lamgao, Mulgoa, Mayem and Sirigao Villages of Bicholim Taluka of North Goa District, Goa		
Name of Entity / Corporate Office	M/s Vedanta Limited		
Village(s)	N/A		
District	NORTH GOA		
Proposal No.	IA/GA/MIN/442593/2023	Category	Non-Coal Mining
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	GOA	Entity's PAN	*****7255M
MoEF File No.	IA-J-11015/3/2023-IA-II(NCM)	Entity name as per PAN	VEDANTA LIMITED

Compliance Reporting Details

Reporting Year	2024
Remarks (if any)	
Reporting Period	01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office	M/s Vedanta Limited	
	Project Area as per EC Granted	Actual Project Area in Possession
Private	421.115	421.115
Revenue Land	57.4053	57.4053
Forest	0	0
Others	0	0
Total	478.5203	478.5203

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Production of Iron Ore	Million Tons per Annum (MTPA)	N/A	3	0.557960	
2	Dry Crushing and Screening Plant	Million Tons per Annum (MTPA)	N/A	4	0.0138	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	7.1 NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
PPs Submission: Complied Obtained NOC for drawing the rainwater harvested/pit water from Goa State Water resource department dated 21/09/2023		Date: 30/11/2024
2	MISCELLANEOUS	5.2 The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
PPs Submission: Complied In house (at project site) environment laboratory for measurement of environment parameter is established. A dedicated team to oversee environment management is setup at site for monitoring of environment parameters. There was no non-compliance in this reporting period.		Date: 30/11/2024
3	AIR QUALITY MONITORING AND PRESERVATION	2.1 The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministrys Regional Office.
PPs Submission: Complied Air quality (Ambient and Fugitive), noise level (core and buffer), water quality (surface water and ground water), water levels (from buffer villages) monitoring is carried out every month. No Drilling and Blasting is carried out. Annexure 1		Date: 30/11/2024
4	PUBLIC HEARING	3.1 The budget of Rs 309.3 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all

		action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities
PPs Submission: Partially Complied Will be complied with, action plan to comply the CER in three years is prepared and accordingly acted upon. its the progress details are maintained and recorded. It is ensured that CER is different from CSR. Annexure 2		Date: 30/11/2024
5	MISCELLANEOUS	8.1 The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.
PPs Submission: Partially Complied Vedanta Bicholim Mines registered under the Apprenticeship Program under Directorate of Skill Development, to identify the local youth who have completed the industrial training institute program and will enhance their skill in line with the industrial requirements. We are in the process of finalising the candidates and will be onboarded for a year-long apprenticeship program in the third week of December 2024. Further, we have registered under the PM Internship Scheme, through which we are identifying the local youth who have completed the graduation or industrial training institute program and will enhance their skill in line with the industrial requirements. We are in the process of receiving the applications from the local community, and the appropriate trade will be engaged for a year-long training before the end of December 2024.		Date: 30/11/2024
6	ENERGY PRESERVATION MEASURES	6.1 The Project Proponent shall explore the possibility of using atleast 20 percent of Electric vehicles/CNG/Solar instead of diesel operation within three years.
PPs Submission: Partially Complied Currently inducted 4 EV Wheel loaders in our mining operation in the reporting period. These Ev machines are under observation to study the performance in the mining condition. Going forward more EV HEMM's and dumpers will be included with the advent in technology and feasibility.		Date: 30/11/2024
7	WASTE MANAGEMENT	4.1 The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF and CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
PPs Submission: Complied Various awareness programmes on the ban of Single Use Plastic conducted as follows Awareness sessions in Bicholim Government High school (beneficiary 35 students) and Sesa technical school at Sanquelim (beneficiary 40 students) Nukkad natak/Skit performed in public area in Bicholim village bus stand on Ban on SUP, Plastic waste and environment protection. Plastic waste awareness and plastic waste collection drive in Sarmanas village and temples 22/04/2024 Awareness session among employees by conducting training sessions 2 training sessions. Posters displays at prominent places withing mine unit like admin building, canteen etc on ban of Single Use Plastic. A report, along with photographs, on the measures taken has been attached as Annexure 3		Date: 30/11/2024
8	MISCELLANEOUS	5.1 The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 72 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the

		qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.	
PPs Submission: Partially Complied The Budgetary provision is mentioned as Rs 72 Cr. in the condition, which is a typo error. The budgetary provision committed and presented to EAC was Rs 72 Lakhs. The adoption of mitigation measures and monitoring of the same as proposed in the EMP is done under the supervision of the qualified environmental personnel. The implementation status of same is attached as Annexure 4.		Date: 30/11/2024	
9	LAND RECLAMATION	14.2 The ecology restoration or mine reclamation activities shall be carried out concurrently with mining operations. The Project Proponent shall ensure that the restoration models demonstrated before the EAC shall be developed in association with research institutes like NEERI, Goa University etc.	
PPs Submission: Being Complied Reclamation activities will be carried out simultaneously with mining activities. The finalised areas will be taken up for reclamation / eco-restoration various projects like pisciculture, theme-based biodiversity garden will be implemented. The company will collaborate with various research institutes/consultants/subject matter experts/forest dept./ agriculture dept. as and when required.		Date: 30/11/2024	
10	Statutory compliance	11.1 The Hon ble Supreme Court has imposed a capping on mining of iron ore to 20 MTPA for the entire State of Goa. Accordingly, the Project Proponent shall first obtain the necessary permission from the competent authority with regard to the amount of mineral they can mine per year, before starting its mining operation.	
PPs Submission: Complied Necessary permission obtained from the competent authority before starting mining operation.		Date: 30/11/2024	
11	LAND RECLAMATION	10.1 The mining lease holders shall, after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.	
PPs Submission: Agreed to Comply Land restoration will be done as per Mine closure plan and it will be implemented scientifically.		Date: 30/11/2024	
12	Human Health Environment	9.1 The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.	
PPs Submission: Complied Periodic Health monitoring and surveillance records are maintained in soft as well as in physical form (register) for mine workers. Mobile Health Unit set for Pilgao, Mayem, Mulgao, Lamgao and Sirigao villages close to our operations with 2,541 footfall for the reporting period. 5 specialized health camps for women, children and old age people conducted - 507 people benefited.		Date: 30/11/2024	
13	Statutory compliance	12.1 The Project Proponent needs to obtain prior permission from the MoEFCC for mining in common boundary as and when required.	
PPs Submission: Agreed to Comply Necessary permission will be obtained from the MoEFCC for mining in common boundary.		Date:	

		30/11/2024
14	Statutory compliance	13.1 As committed before the EAC, the Project Proponent needs to explore the feasibility for installing conveyor belt system for transportation.
PPs Submission: Partially Complied The company has explored the feasibility for OLBC with capacity of 3 MTPA from dry mineral processing plant to Sarmanas Jetty covering a length of 5.772 km. Further detailed studies and rigorous assessments are recommended to identify the optimal system for implementation, considering specific mine conditions and livelihood of the local stakeholders along with long-term operational benefits.		Date: 30/11/2024
15	LAND RECLAMATION	14.1 The mined out pits will be converted into water reservoirs, pond with other ecotourism facilities like water sports, boating, fishing etc., Pisciculture in mine pits will be developed and also the local community will be involved for cage fishing to make it a commercially viable venture.
PPs Submission: Being Complied Reclamation activities will be carried out simultaneously with mining activities. The finalised areas will be taken up for reclamation / eco-restoration various projects like pisciculture, theme-based biodiversity garden will be implemented. The company will collaborate with various research institutes/consultants/subject matter experts/forest dept./ agriculture dept. as and when required.		Date: 30/11/2024
16	GREENBELT	16.2 The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95 percent survival rate, action plan for achieving the target survival rate shall be submitted to the Ministries Regional Office.
PPs Submission: Partially Complied The safety belt/ peripheral plantation will be completed within three years from start of operations. Aftercare will be provided to the saplings so as to achieve maximum survival rate.		Date: 30/11/2024
17	MISCELLANEOUS	18.3 Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to the Regional Office of MoEFCC. Regular sprinkling shall be done on roads to suppress the dust at the source.
PPs Submission: Complied Fugitive dust monitoring is done within mine area such as haul road, mine face, screening plant and dumping site. Reports are attached as Annexure 1. Regular sprinkling on haulage road is done to suppress the dust.		Date: 30/11/2024
18	WATER QUALITY MONITORING AND PRESERVATION	15.1 Regular monitoring and analysis of discharge water and at upstream and downstream of Bicholim and Asnora river needs to be carried out quarterly through NABL/MoEFCC accredited laboratory.
PPs Submission: Complied Regular monitoring of mine discharge water and upstream and downstream of Bicholim and		Date:

Assonora river is being carried out every month through NABL/MoEFCC accredited laboratory.		30/11/2024
19	GREENBELT	16.1 Extensive native fruit bearing plantation shall be carried out in all safety zones with density of 2500 trees/ha.
PPs Submission: Partially Complied Plantation exists in safety zone area. it will be further strengthened by gap filling with native species.		Date: 30/11/2024
20	MISCELLANEOUS	18.1 The Project Proponent needs to install the permanent water sprinklers along 3.40 km haul road within the ML area and 2.80 km length outside the ML area on either side of the road.
PPs Submission: Being Complied Will be complied with in phases.		Date: 30/11/2024
21	LAND RECLAMATION	17.1 The waste dump slopes shall be covered with laterite material and then with biodegradable geotextile mats to prevent the soil erosion of the dump slopes so as to facilitate the growth of native species.
PPs Submission: Complied Approx. 2 ha of final waste dump has been covered with laterite material and geotextiles as to facilitate the growth of native species.		Date: 30/11/2024
22	MISCELLANEOUS	18.2 As committed by the Project Proponent, existing trucks of 10.5 Tonnes shall be replaced with higher capacity trucks of 25 Tonnes in phased manner to reduce traffic load and emissions per tonne/km.
PPs Submission: Agreed to Comply Will implemented in phased manner after consultation with local stake holders and Government authorities.		Date: 30/11/2024
23	WATER QUALITY MONITORING AND PRESERVATION	21.2 The catch drains and siltation ponds needs to be regularly maintained to arrest silt and sediments flow from dumps.
PPs Submission: Being Complied The catch drains and siltation ponds are maintained and desilted before the onset of monsoon to arrest silt and sedimentation flow from dumps.		Date: 30/11/2024
24	AIR QUALITY MONITORING AND PRESERVATION	18.4 The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
PPs Submission: Being Complied Will be complied with when the crushing/ screening plant will be installed.		Date: 30/11/2024
25	GREENBELT	22.1 TThe Project Proponent needs to develop a nursery adjacent to the mineral block (Survey no 72/4 in Bicholim Village) for an area of about 1100 sq.m in consultation with State Forest Department. PP shall develop theme-based gardens like medicinal gardens, horticulture gardens, spice gardens etc.,
PPs Submission: Being Complied Nursery has been developed at the identified location. Native species of sapling collected and developed in consultation with forest department.		Date: 30/11/2024

26	MISCELLANEOUS	20.1 The Project Proponent needs to speed up the process of construction of underpass.
PPs Submission: Being Complied Under pass work will be executed by Public Works Department of State Government. The advance payment for the work is done.		Date: 30/11/2024
27	AIR QUALITY MONITORING AND PRESERVATION	19.1 The wheel washing facility for the ore transport vehicles shall be provided at the exit point of the mine.
PPs Submission: Complied The wheel washing facility for the ore transport vehicles is provided at the exit point of the mine.		Date: 30/11/2024
28	MISCELLANEOUS	21.1 The Project Proponent needs to strengthen the settling pond with proper stone pitching in line with the design of settling pond considering the annual rainfall, flow rate, catchment area and its discharge.
PPs Submission: Being Complied Settling ponds are provided considering rainfall and are regularly maintained. Desilting of settling ponds is carried out before onset of monsoon. Proper overflow arrangement provided		Date: 30/11/2024
PPs Submission: Being Complied Settling ponds are provided considering rainfall and are regularly maintained. Desilting of settling ponds is carried out before onset of monsoon. Proper overflow arrangement provided		Date: 30/11/2024
29	MISCELLANEOUS	24.1 The Project Proponent needs to use modern equipments such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man Animal conflict.
PPs Submission: Being Complied We have prepared and submitted Wildlife Conservation Plan to Forst Department including provision of funds for installation of camera. WLCP is under scrutiny and will be executed in consultation with Forest Department once approved.		Date: 30/11/2024
30	MISCELLANEOUS	23.1 The Project Proponent needs to modify the crushing and screening units within 4 months from the date of issue of this EC.
PPs Submission: Agreed to Comply The erection of crushing and screening pant is yet to be started. All the necessary maintenance, modification, safety and environment protective measures will be carried out before getting the plant into operation.		Date: 30/11/2024
31	MISCELLANEOUS	24.2 The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
PPs Submission: Being Complied Complied. Latest mining soft ware is used for mine planning. Advanced mining machinery is used for mining operations.		Date: 30/11/2024
32	Statutory compliance	1.1 The instant Environmental Clearance (EC) is subject to the outcome of the WP 592 of 2022 (MSPL v. State of Goa and Ors.) regarding challenging the constitutionality of the tender documents of Phase I auction of Goa mines and PIL WP 2029/2023 (F) (Suresh

		Govind Gaonkar and Ors v. Directorate of Mines and Geology and Ors) regarding challenging the states decision to go ahead with the auction of the mining block.
PPs Submission: Being Complied WP 592 of 2022 (MSPL v. State of Goa and Ors) has been dismissed and the validity of tender documents and LOI was upheld. PIL WP 2029/2023 (F) (Suresh Govind Gaonkar and Ors v. Directorate of Mines and Geology and Ors) is pending before the Hon ble Bombay High Court at Goa		Date: 30/11/2024
33	AIR QUALITY MONITORING AND PRESERVATION	25.1 The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB
PPs Submission: Partially Complied 3 CAAQMS are procured and under installation. The real time data so generated will be displayed digitally at entry and exit gate of mine lease area for public display and will be linked to server of Goa State Pollution Control Board.		Date: 30/11/2024
34	MISCELLANEOUS	24.3 The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministrys Regional Office in the six monthly compliance report.
PPs Submission: Being Complied Wild Life Conservation Plan submitted to Forest Department. WLCP is under scrutiny and will be executed in consultation with Forest Department once approved.		Date: 30/11/2024
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Statutory compliance	1.1 This Environmental Clearance (EC) is subject to orders/ judgment of Hon ble Supreme Court of India, Hon ble High Court, Hon ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
PPs Submission: Complied Complied.		Date: 30/11/2024
2	Statutory compliance	1.2 The Project proponent complies with all the statutory requirements and judgment of Hon ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India and Ors before commencing the mining operations.
PPs Submission: Complied This judgement pertains to mining operations in the state of Odisha and therefore is not applicable for us. We are however complying with all statutory provisions, approvals and consent requirements for our mining operations.		Date: 30/11/2024
3	Statutory compliance	1.4 The Project Proponent shall follow the mitigation measures provided in MoEFCCs Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.

PPs Submission: Being Complied Mitigation measures are followed which are applicable and are under compliance and part of EC conditions		Date: 30/11/2024
4	Statutory compliance	1.5 A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
PPs Submission: Complied Complied		Date: 30/11/2024
5	Statutory compliance	1.3 The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining and Geology in strict compliance of Judgment of Hon ble Supreme Court dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India and Ors.
PPs Submission: Complied This judgement pertains to mining operations in the state of Odisha and therefore is not applicable for us. We are however complying with all statutory provisions, approvals and consent requirements for our mining operations.		Date: 30/11/2024
6	MISCELLANEOUS	1.6 State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collectors office/ Tehsildars Office for 30 days.
PPs Submission: Agreed to Comply In scope of State Pollution Control Board		Date: 30/11/2024
7	WATER QUALITY MONITORING AND PRESERVATION	3.2 Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
PPs Submission: Partially Complied Ground water level and quality in and around the mine lease is being carried out in Lamgao, Mulgao, Bicholim, Pilgao and Mayem village, every month. New piezo meter (2 nos) installation is under process and in consultation with Water Resource department.		Date: 30/11/2024
8	MISCELLANEOUS	1.7 The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
PPs Submission: Complied		Date:

EC was widely publicized on Lokmat (vernacular language) and The Navhind times on 29th January 2024		30/11/2024
9	MISCELLANEOUS	1.8 The Project Proponent shall inform the MoEF and CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
PPs Submission: Agreed to Comply Will be ensured. Currently there is no change in ownership/transfer of EC.		Date: 30/11/2024
10	AIR QUALITY MONITORING AND PRESERVATION	2.1 The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120 degree is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
PPs Submission: Partially Complied Installation of 3 CAAQMS is under process. The real time data so generated will be displayed digitally at entry and exit gate of mine lease area for public display and will be linked to server of Goa State Pollution Control Board The ambient air quality is monitored at prominent places like office building, canteen. Data is displayed on online display board and same shared to Goa State Pollution Control Board.		Date: 30/11/2024
11	WATER QUALITY MONITORING AND PRESERVATION	3.6 Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
PPs Submission: Being Complied Industrial waste water (workshop and waste water from the mine) is properly collected and treated after its initial passage through Oil and grease trap so as to conform to the notified standards prescribed through Consent to Operate (CTO) issued by Goa State Pollution Control Board (SPCB).		Date: 30/11/2024
12	WATER QUALITY MONITORING AND PRESERVATION	3.4 Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
PPs Submission: Being Complied		Date:

The mine discharge water is being monitored for said parameters. The monitored data is uploaded in company website and on online display board near mine gate of the company.		30/11/2024
13	WATER QUALITY MONITORING AND PRESERVATION	3.7 The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF and CC and State Pollution Control Board/Committee.
PPs Submission: Complied Water Balance is prepared and submitted to Regional office MoEF CC and Goa SPCB. Rainwater is harvested in mine pits and same water is used for dust suppression at mines and road washing.		Date: 30/11/2024
14	WATER QUALITY MONITORING AND PRESERVATION	3.3 The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-a-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
PPs Submission: Being Complied There is no water bodies/course flowing in the lease. Bicholim river and Assonora river is flowing around the lease and regular monitoring of upstream and down stream is being carried out. The storm water management is prepared, and surface runoff water is properly channelized into settling ponds, through trenches/garland drains Monitoring is carried out for the parameters as specified by GSPCB. Ensured that no obstruction and/ or alteration be made to water bodies during mining operations. There is not water courses/spring flowing within mine lease		Date: 30/11/2024
15	AIR QUALITY MONITORING AND PRESERVATION	2.2 Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
PPs Submission: Complied Regular water sprinkling is carried out on haul road, loading unloading points to control Fugitive dust emissions. Use of suitable water-soluble chemical dust suppressing agents will be explored. Air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.		Date: 30/11/2024
16	WATER QUALITY MONITORING AND PRESERVATION	3.1 In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become

	PRESERVATION	operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro- geological study of the area.
PPs Submission: Complied Detailed hydrogeological study was carried out and submitted to the Water Resource department (WRD) for obtaining their NOC and MoEF Cc as part of EIA for obtaining EC NOC obtained from WRD, Goa government.		Date: 30/11/2024
17	Noise Monitoring & Prevention	4.3 The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
PPs Submission: Complied All the necessary measure (as per EIA) to control of noise levels below 85 dBA in the work environment are implemented. All employees are provided with necessary protective respiratory masks, ear plugs/muffs along with adequate training, awareness and information on safety and health aspects.		Date: 30/11/2024
18	WATER QUALITY MONITORING AND PRESERVATION	3.5 Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
PPs Submission: Being Complied The rainwater is channelised through trenches, drains and settling pits and harvested in the mine pit. Majority of the water requirement of mines is met through the harvested rainwater. Report on amount of water harvested in mine pit will be submitted in next 6 monthly report.		Date: 30/11/2024
19	Noise Monitoring & Prevention	4.1 The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
PPs Submission: Agreed to Comply There is no drilling and blasting involved in the project.		Date: 30/11/2024
20	MINING PLAN	5.1 The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.) technology; lease area scope of working (method of mining, overburden , dump management, O.B dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure land use of the mine lease area at various stages of mining scheme as well as at the end of life etc.).
PPs Submission: Being Complied Mining is carried out as per approved mining plan		Date: 30/11/2024

21	Noise Monitoring & Prevention	4.2 The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
PPs Submission: Being Complied Floodlights/ masks are oriented away from the villagers. All necessary measures taken to ensured that the noise levels is well within the prescribed limits for day /night hours.		Date: 30/11/2024
22	LAND RECLAMATION	6.3 Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
PPs Submission: Complied The runoff water is channelized properly in to garland drains and then to the settling ponds. Laterite boulder walls are constructed at the toe of the dump. The harvested rainwater is utilized for dust suppression, green belt development, plantation etc. the drains and settling ponds are de silted before the onset of the monsoon		Date: 30/11/2024
23	MINING PLAN	5.2 The land-use of the mine lease area at various stages of mining scheme as well as at the end-of- life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
PPs Submission: Agreed to Comply Will be ensured. For the reporting period, ROM 497920 Tonnes Backfilling 41,64,543 Tonnes		Date: 30/11/2024
24	MISCELLANEOUS	7.1 No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a bypass road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. If applicable in case of road transport

PPs Submission: Being Complied Most of the road used for transportation is dedicated road which joins the Major district road (MDR20) before entering the Jetty.		Date: 30/11/2024
25	LAND RECLAMATION	6.1 The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
PPs Submission: Being Complied Dumping is carried out at earmarked sites within the mine as per approved Mining Plan and the guidelines/circulars issued by D.G.M.S Entire area proposed for mine working is broken up- no top soil.		Date: 30/11/2024
26	LAND RECLAMATION	6.2 The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
PPs Submission: Being Complied Use of geotextiles , grass and plantation with native species is done to stabilize the dump slopes and prevent slope failure. Inward slope are provided to each dump bench to channelize run off rain water properly into garland drains, filter beds and then to the settling ponds. Laterite boulder walls will be constructed at the toe of the dump.		Date: 30/11/2024
27	LAND RECLAMATION	6.4 Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50 percent shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
PPs Submission: Complied Check dams of appropriate size, gradient and length is constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies Adequate safety margin is kept considering maximum rainfall and discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. All drainages are connected to series of settling ponds		Date: 30/11/2024
28	GREENBELT	8.1 The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

PPs Submission: Being Complied Green belt development will be carried out as per approved mining plan, CPCB guidelines.		Date: 30/11/2024
29	MISCELLANEOUS	7.2 The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
PPs Submission: Partially Complied Permanent water sprinkling arrangement for dust suppression will be done in phased manner. Dedicated water tankers are deployed for dust suppression on the mines haulage roads. There is no fixed crushing plant at the mine. Goa Iron Ore is having inherent moisture content of approx. 12 percent due which there is no generation of dust while ore handling, however continuous dust suppression is carried out through water tankers Ore transportation is done through tippers, by road.		Date: 30/11/2024
30	PUBLIC HEARING	10. 1 Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
PPs Submission: Partially Complied Not applicable		Date: 30/11/2024
31	GREENBELT	9.2 The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
PPs Submission: Being Complied There are no grazing land within mine lease.		Date: 30/11/2024
32	GREENBELT	9.1 The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision

		shall be made for protection and care of trees.
	PPs Submission: Being Complied Plantation and afforestation in backfilled final dumps, reclaimed areas and other locations in mine lease with native species in consultation with State Forest Department. The company will collaborate with various research institutes/consultants/subject matter experts/forest dept./agriculture dept. as and when required. After care for the plantations are done and adequate budgetary provision are made.	Date: 30/11/2024
33	MISCELLANEOUS	12.7 The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
	PPs Submission: Agreed to Comply Noted	Date: 30/11/2024
34	MISCELLANEOUS	12.4 A separate Environmental Management Cell with suitable qualified manpower should be setup under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.
	PPs Submission: Complied A separate Environmental Management Cell is set up with suitable qualified manpower under Health-Safety and Environment. Senior executive is reporting to Head of the Organization and EHS Head at corporate.	Date: 30/11/2024
35	MISCELLANEOUS	12.6 In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
	PPs Submission: Agreed to Comply Final mine closure plan will be scientifically implemented as approved by IBM.	Date: 30/11/2024
36	Corporate Environmental Responsibility	11.1 The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
	PPs Submission: Complied Time bound action plan was submitted along with the compliance report submitted in the month of May 24. Attaching the report for ready reference. Annexure 5	Date: 30/11/2024
37	MINING PLAN	12.2 The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

PPs Submission: Being Complied -		Date: 30/11/2024
38	Statutory compliance	12.3 The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
PPs Submission: Being Complied Will be complied with.		Date: 30/11/2024
39	MINING PLAN	12.1 The Project Proponent shall prepare digital map (land use land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF CC.
PPs Submission: Complied Complied		Date: 30/11/2024
40	MISCELLANEOUS	12.5 The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.
PPs Submission: Agreed to Comply Will be ensured		Date: 30/11/2024
41	Statutory compliance	12.9 The above conditions will be enforced inter alia, under the provisions of the Water (Prevention Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
PPs Submission: Agreed to Comply Noted		Date: 30/11/2024
42	Statutory compliance	12.8 Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
PPs Submission: Agreed to Comply Noted		Date: 30/11/2024
43	Statutory compliance	12.10 Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
PPs Submission: Agreed to Comply Noted		Date:

30/11/2024

Visit Remarks

Last Site Visit Report Date:

N/A

Additional Remarks:

6 Monthly EC Compliance BLOCK I Bicholim Mineral Block April-Sept 2024 attached in additional attachments.

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

