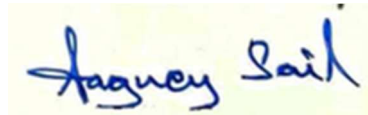


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THROUGH**



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- (i) **GREENFIELD vs BROWNFIELD** - EAC wrongly accepted this project as 'greenfiled' and ignored the 'Approved Mining Plan' which records that from 1969 to 2017, 1153 bore holes totaling to length of 97,320.60 m were drilled in the same mining lease area.
- (ii) Pendency of case concerning NEERI report before the Bombay High Court at Goa doesn't ouster the Appellate Jurisdiction of NGT.
- (iii) Failure of Respondent No. 3 to address submissions pertaining to EIA Report preparation in only four (4) days after issuance of ToR.
- (iv) Attempt by Respondent No. 3 to mislead through incorrect interpretation of statutory provisions.
- (v) All issues raised in the present appeal are within the jurisdiction of this hon'ble tribunal:
- (vi) Risk of landslides not scientifically assessed in EIA report.
- (vii) The corporate veil must be pierced in the instant matter.
- (viii) Respondent no. 3 made false statement about owning road and also changed transportation route as approved under the ec.
- (ix) No response to why public hearing was held 12 kms away from the village and why it continued till 0130am on 12.08.2023.

(i) GREENFIELD vs BROWNFIELD - EAC WRONGLY ACCEPTED THIS PROJECT AS 'GREENFILED' AND IGNORED THE APPROVED MINING PLAN WHICH RECORDS THAT FROM 1969 TO 2017 1153 BORE HOLES TOTALING TO 97,320.60 m WERE DRILLED IN THE SAME MINING LEASE AREA:

3. That in paras 13 to 27 of the reply of R3 has contended that the environmental clearance process for a greenfield project is more rigorous than that for a brownfield project, and that they are “doing better” for the environment by applying for a greenfield project. In doing so the Respondent No. 3, Vedanta is misdirecting from the major issue that they have ignored the 2005 EC. The 2005 EC, as the present Appeal contends, *“recorded the fact that the mine would exhaust in ten years, with an annual production of 2 MTPA. The EC required a mine closure plan and several other requirements to be met during the conduct of mining operations. Neither the EAC nor the EC have reviewed the 2005 EC and the implementation of the conditions imposed, including declaration of mine closure.”*
4. Clearly the designation of the block as a greenfield project allows Respondent No. 3 to dodge the clear requirements stated in the 2005 EC.
5. The reply of R3 says that “a brownfield project does not have to undergo the same level of detailed in-depth scrutiny as a greenfield project,” this is an erasure of the history and context of the Bicholim mine, which is not only a regular brownfield project, but one where the environmental irregularities were so egregious that the Supreme Court of India had to intervene. In fact, a better implementation of the EIA Notification 2006 in the present case would have resulted from the compliance of the

MoEF&CC letter dated 29.04.2020 which requires that the State Government concerned shall apply as project proponent seeking EC and after obtaining the same transfer it to the successful bidder holding Letter of Intent (LoI). The reason being that the State would not have suppressed the past mining in the same block (mining lease area) since 1941. A true and correct copy of the MoEF&CC letter dated 29.04.2020 is hereto marked and annexed as **ANNEXURE – R3/1**.

6. That the Respondent No. 3 makes the fallacy of consequentialism. They claim that they are more conscientious about the environment insofar as greenfield clearances are more rigorous and therefore more desirable from an environmental perspective. They appeal to an ostensibly desirable consequence – more rigorous clearances – in order to justify falsification (wiping of the pollution/destruction caused due to past mining operations) of the history of the mine. The actual reason for why they do not wish for the mine to be classified as a brownfield project is that this would require them to be in compliance with the 2005 EC stipulation about the mine being exhausted and its requirement for a mine closure plan. In addition, the past environmental degradation caused will have to be addressed.
7. That it is pertinent to point out that EAC should not have blindly accepted the project classification as a 'greenfield project' by the Respondent No. 3 and should have scrutinized the 'approved

mining plan' dated 26.05.2023 of the impugned project submitted to them as recorded in their minutes of meeting held from 21.09.2023 to 22.09.2023 (ANNEXURE-A25 at Pg. 256-257). The approved mining plan at para 2A.2.1.7 clearly states that for exploratory drilling for Core holes between 07.07.1969 to 19.12.2017 a total of 1153 boreholes were drilled totaling to 97,320.60 m of drilling by Sesa Mining Corporation Limited in the said mining lease area. In addition to this figure/data detailed logsheets of each borehole is provided as an MS excel file of about 553 pages. True and correct copy of the relevant extracts of the Approved Mining Plan dated 26.05.2023 and the two logsheet pages showing borehole records are hereto marked and annexed as **ANNEXURE – R3/2(colly)**. Hence, it is submitted that the EAC failed to consider during its meeting held from 21.09.2023 to 22.09.2023 that the Approved Mining Plan which clearly established that the impugned project cannot be a 'greenfield project' as mining (core hole drilling) is recorded from 07.07.1969 till 2017, though it started much earlier.

8. That the Respondent No. 3 has chosen for reasons best know to them not to bring on record the complete ANNEXURE-R3-2 which is the 14th EAC meeting agenda. It is pertinent to mention that the agenda contains three Annexures (ANNEXURE-I, ANNEXURE-II & ANNEXURE-III) and the entire agenda is totaling to forty (40) pages. However, the last two pages which is ANNEXURE-III has not been annexed. A true and correct copy of the said

ANNEXURE-III (two pages) is hereto marked and annexed as **ANNEXURE – R3/3**. However, the ANNEXURE-III as attached to the 14th EAC meeting agenda is printed in such a manner that part of it is deleted. However, the Appellants were able to find out that the complete ANNEXURE-III, which is common for all EAC meeting agendas (Non-Coal mining sector) is available in the agenda to the 11th EAC meeting, which is **ANNEXURE – R3/4**. This ANNEXURE-III is for brownfield projects wherein mining details of the past years is submitted to the EAC which is corresponding to ToR No. 20. Hence, the contention that a brownfield project doesn't have to undergo the same level of detailed in-dept scrutiny as a greenfield project is completely misplaced and wrong in light of the above and also ToR 20, 26 & 71(based on MoEF&CC Circular dated 30.05.2012 – refer Pg. 382).

9. That the reliance placed on MoEF&CC O.M. dated 31.03.2011 by the Respondent No. 3 in para 22 of its reply is completely misplaced and based on wrong understanding / interpretation. It is submitted that the said O.M. is only applicable to mining projects which involve diversion of forestland and in the present case there is not such diversion involved.

10. That the contentions in para nos. 31, 32 & 33 of the reply of R3 pertaining to misleading this Hon'ble Tribunal w.r.t. responses given to ToR 20 & 71 by the Respondent No. 3 is completely

false. It is submitted that the specific quotations of these two ToRs with their compliances, given in the Appeal (Paras 17 & 18 – Pg. 19-20) are taken from the Draft EIA Report TOR Compliance which is **ANNEXURE-R3/5**. The said document was prepared by the Respondent No. 3 through its EIA consultant and the same is uploaded on the MoEF&CC website (parivesh.nic.in) as part of the Draft EIA Report.

(ii) PENDENCY OF CASE CONCERNING NEERI REPORT BEFORE THE BOMBAY HIGH COURT AT GOA DOESN'T OUSTER APPELLATE JURISDICTION OF NGT:

11. In response to the contentions of paras 34 to 37 of the reply of R3, it is submitted that the same are not applicable as the reliance and reference to the NEERI Report in the present Appeal is to only highlight the past environmental pollution / devastation caused to the villages and its ground-water system. No adjudication of the issues concerning payment of compensation for the pollution caused and implementation of the recommendations of NEERI report have been sought in the present Appeal. In 2010 High Court accepted the NEERI Report (Order dated 08.07.2010 at Pg. 386-390) and directed implementation of the recommendations made in the report. The NEERI report was accepted by the Goa State Pollution Control Board. The mining companies were provided a hearing on the report, after which the Board issued certain directions under

section 33(A) of the Water Act, as recommended by NEERI, to the mining companies. That pursuant to the NEERI report a meeting was called by the Sr. Hydrogeologist of the Goa government on 27.01.2010. A report of the meeting was sent to the Goa State Pollution Control Board. Thereafter, the Sr. Hydrogeologist produced an assessment/Feasibility Report of the mitigation measures recommended by NEERI to address water scarcity problem in Mulgao village (June 2010). The recommendations made by NEERI for rejuvenation of the water supply of the Maulgao village could not be implemented as they did not find favour with either the Water Resources Department or the Central Ground Water Board.

12. That reliance placed by the Respondent No. 3 to the case of State of Andhra Pradesh v. Raghu RRK reported in 2022 (8) SCC 516, is misplaced and not applicable, as in this case there were conflicting orders passed by the High Court of Andhra Pradesh and this Hon'ble Tribunal. The High Court of Andhra Pradesh had granted an interim order dated 06.05.2022 staying the construction of a resort and on 20.05.2022 this Hon'ble Tribunal issued an order staying the High Court's order dated 06.05.2022. In the present case, there is no such conflict as no adjudication of the issues arising from the NEERI Report have been sought in the present Appeal. The case which is ongoing in the Bombay High Court at Goa in PILWP No. 01/2008 is concerning

implementation of the recommendations of the NEERI Report and payment of compensation by the mining companies towards the same. Similarly, the second and last case relied upon by the Respondent No. 3 which is judgment dated 04.05.2023 passed by this Hon'ble Tribunal in Appeal No. 18/2022 (WZ) titled Pravir Prabhakar Fadte v. MoEF&CC is also misplaced and in that case this Hon'ble Tribunal held that challenge to EC before NGT is maintainable as the same was not pending before the High Court (refer Para 36 of the judgment).

13. That the Appellants submit that NEERI Report also highlights the failure of the EAC to appraise the issue of cumulative impact assessment of the impugned project. The EAC failed to appreciate that three mining blocks (including the present mining block – I) had been operating earlier, adjacent to each other. The first mining block No. III (Monte De Sirigao Mineral Block – 95.67 Ha) given to Rajaram Bandekar (Sirigao) Mines Pvt. Ltd. has been recommended by the same EAC for grant of environmental clearance (EC granted on 09.09.2024 for 0.5 MTPA of iron ore). The second mining block no. II is Sirigao-Mayem Mineral Block (171.24 Hectares) adjacent to MB-III was given to Salgaocar Shipping Company Pvt. Ltd. has been recommended by the same EAC for grant of environmental clearance (EC granted on 09.10.2024 for 1 MTPA of iron ore). It is not clear why all three mining blocks were not required to conduct a cumulative

environmental impact assessment and environment management plan in view of the fact that it has already been established by several expert committee reports that all the leases connected with mineral block nos. 1-3 have had cumulative impacts on Mulgao and Shirgao villages in terms of destruction of fields, water bodies, roads, river (CRZ river) and total disturbance of village settlements located on the said leases. If the expert appraisal committee had not come to the conclusion that a cumulative impact assessment was required in the present circumstances even when there was a specific objection to this raised during the public hearing and in the DGPS Sketch Plate No. 2 which is the geo referenced cadastral map of 1:3960 scale at internal page 266 of the Final EIA Report which is not a high resolution image, so the same Plate No. 2 showing presence of MB-III is taken from Pg. 252 of the Draft EIA Report and the cadastral Map of Mining Block III from its Final EIA Report showing all three mining blocks are hereto marked and annexed as **ANNEXURE – R3/6(colly)**. It is also pertinent to mention that the Respondent No. 3 in its Form I has chosen not to disclose the cumulative effects due to proximity to other projects (MB-III and MB-II). A true and correct copy of the Form-I of the Respondent No. 3 is hereto marked and annexed as **ANNEXURE – R3/7**.

**(iii) FAILURE OF RESPONDENT NO. 3 TO ADDRESS SUBMISSIONS
PERTAINING TO EIA REPORT PREPARATION IN ONLY FOUR
DAYS AFTER ISSUANCE OF ToR:**

14. The Appellants state that Respondent No. 3 has miserably failed in addressing submissions pertaining to the preparation of EIA Report merely 4 days after issue of ToR by the MoEF&CC vide letter dated 16.06.2023. Furthermore, as evidenced by Pg. 100 of the Paper Book, the 'Disclosure of Consultants' as contained in the EIA Report clearly indicates that the EIA Report claims to have the involvement of 14 expert members from various scientific/functional areas.

15. That the duration of involvement for preparation of the EIA Report clearly states that out of 14 members, 9 members were involved in EIA Report preparation for the duration between 15.02.2023 to June 2023, 3 members were involved for the period of April 2023, 1 member was involved from March 2023 to June 2023, and 1 member was involved for the period of May 2023.

16. That this clearly indicates that no expert involvement was provided for the preparation of EIA Report at any point after June 2023. In this context, the Appellants submit that the ToR dated 16.06.2023 prescribed 19 specific Terms of Reference covering over 8 distinct areas, such as Waste Management, Land and

Water Environment, Socio Economic Measures, Greenbelt Development, Environment Monitoring, etc.

17. Therefore, it can be stated to a rational certainty that the preparation of the EIA Report was not carried out in a scientifically rigorous manner with a detailed assessment of all the requirements prescribed by the ToR. Furthermore, the Undertaking as signed by the EIA Consultant, as on Pg. 97 of the Paper Book, clearly evidences that the EIA Consultant as affirmed on 20.06.2023 that the "*prescribed ToRs have been complied with...*". However, the Appellants submit that 19 Specific ToRs (issued on 16.06.2023) cannot be said to have been complied with merely in a matter of a four (4) days, especially since the Specific ToRs prescribe various detailed plans, including action plan for year wise backfilling, plan for ecology restoration, scheme for mandatory recycle/reuse of water, measures required for prevention of seepage into groundwater, engineering design for garland drain, greenbelt/afforestation development plan, skill development plan for local people, environment management plan, and various other such measures designed at environmental conservation.

18. As the specific ToRs issued to each project are unique and are prescribed exclusively to each project proponent based on the peculiar facts and circumstances of the ecology and project involved. No EIA Report can be stated to be complete and valid

unless it has sufficiently addressed the Specific ToRs issued. Accordingly, it cannot be said that the impugned EIA Report prepared within 4 days from issue of ToRs is valid.

19. Accordingly, the Appellants in the present Appeal had submitted issues regarding serious and glaring lapses in EIA Report preparation. However, the EAC have failed to take cognizance of such glaring lapses, thereby indicating a total absence of mind in assessment of the impugned project. Additionally, the said issues have also not been addressed in any manner by the Respondent No. 3 in its reply.

20. It is pertinent to note that out of the four (4) days, two (2) days were a Saturday (on 17.06.2023) and a Sunday (on 18.06.2023), indicating an even less likelihood of the EIA Report being prepared within such short duration of two days (effectively) if one excludes two days of the weekend. That the Appellants rely on the order of this Hon'ble Tribunal in *Sreeranganathan KP v Union of India 2014* reported in ALL (I) NGT Reporter (1) (SZ) 1 wherein this Hon'ble Tribunal has deprecated the practice of collecting data before finalization of ToR by the EAC, and has held the same to be untenable in the eyes of law.

21. Accordingly, the Appellants submit that the preparation of the entire EIA Report within merely four (4) days after issuance of ToR raises serious concerns which ought to have been appraised

by the EAC as the compliance with ToRs is of material importance as per the EIA Notification, 2006. The Appellants rely on the judgment dated 7.04.2016 passed in Appeal No. 39 of 2012 titled 'Save Mon Region Federation and Anr. V. Union of India and Ors.' wherein this Hon'ble Tribunal has held that ToRs are material to EIA Studies, which leads to the EIA Report.

(iv) ATTEMPT BY RESPONDENT NO. 3 TO MISLEAD THIS HON'BLE TRIBUNAL THROUGH INCORRECT INTERPRETATION OF STATUTORY PROVISIONS:

22. That in Para 28 of reply of R3, it is stated that they are entitled to a 'clean slate', as per Rule 9A(9) of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 (MCR 2016). Rule 9(A) is in CHAPTER III: MINERAL CONCESSIONS GRANTED THROUGH AUCTION of the MCR 2016 which clearly provides for,

*"Rule 9A: 'Conditions for issuance of vesting orders and for obtaining rights, approvals, clearances, licenses and like under **section 8B of the Act**'.*

(1)...

...(9) No authority shall reject grant of any rights, approvals, clearances, licenses and the like to the new lessee on account of past violations or outstanding dues of the previous lessee, which may be agitated before appropriate forums separately without prejudice to any rightful legal claims of the parties.'

23. The Appellants submit that in Para 30 of reply of R3, Respondent No. 3 has stated that "there is a statutory bar on an authority from

considering past violations of the previous lessess, owing to which the EAC was barred from considering past violations". However, the Appellants submit that such interpretation of Rule 9A(9) of the MCR, 2016 is wholly incorrect and inconsistent with the provisions of parent act i.e. Section 8B of the Mines and Minerals (Development and Regulation) Act, 1957 ('MMDR Act' for short). That, Section 8B of the MMDR Act states as follows:

"8B. Provision for period and transfer of statutory clearances:

*(1) Notwithstanding anything contained in this Act or any other law for the time being in force, all valid rights, approvals, clearances, licences and the like granted to a lessee in respect of a mine (other than those granted under the provisions of the Atomic Energy Act, 1962 (33 of 1962) and the rules made thereunder) shall continue to be valid even after expiry or termination of lease and such rights, approvals, clearances, licences and the like shall be transferred to, and vested; **subject to the conditions provided under such laws;** in the successful bidder of the mining lease selected through auction under this Act:*

..." (emphasis supplied)

24. Accordingly, it is submitted that the said Section 8B of MMDR Act clearly deals with transfer of statutory clearances from original lessees to subsequent lessess, and does not fall within the ambit of the present matter, as the present matter does not involve transfer of any statutory clearances but rather issuance of fresh EC.

25. That Respondent No. 3 has in no way, form, or manner indicated that the any previously issued statutory clearances under MMDR

Act to any juristic entity has been transferred to itself, and therefore, the invocation of said Section 8B of MMDR Act by Respondent No. 3 to claim for themselves a "clean slate" is entirely untenable and smacks of a deliberate attempt to mislead this Hon'ble Tribunal by an improper interpretation of the said Section 8B.

26. To say that the EAC is barred under MMDR Act and MCR 2016, from considering past violations under the regime of the EIA Notification, 2006, especially in the context of specific information regarding past violations of EC conditions being sought by the EAC in ToR 71, is a wholly unfounded and *mala fide* statement, made with an intent to deceive. EAC is governed by the EP Act and the EIA Notification, 2006 regime and not the MMDR Act and MCR 2016. That such deliberate attempts at misleading this Hon'ble Tribunal must be penalized with imposition of exemplary costs. That as held by the Hon'ble Supreme Court in Civil Appeal No. 12251 of 2018 ***Hanuman Laxman Aroskar v. Union of India and Ors.*** vide order dated 29.03.2019, "*that the project proponent must submit all information and data without concealing relevant features is a basic hypothesis and expectation of the 2006 notification.*"

(v) ALL ISSUES RAISED IN THE PRESENT APPEAL ARE WITHIN THE JURISDICTION OF THIS HON'BLE TRIBUNAL:

27. With regards to the contents of paragraph 40-41 of reply of R3, Respondent No. 3 has made two submissions viz., that the

“assessment of mineral reserves and their conservation is a function exclusively within the domain of Ministry of Mines”, and the MMDR Act, 1957 and its Rules made thereunder are beyond jurisdiction of NGT as the same are not listed in Schedule I of the NGT Act, 2010. That the contents of paragraph 40 are rejected as being false, misleading, and untenable in law.

28. That the Appellants submit that Schedule I Acts are only made relatable to applications filed under Sections 14(1), 15(1)(a), 17, and 19(4)(j), whereas the present matter is an Appeal filed under Section 16(h) of the National Green Tribunal Act, 2010. That Appellant, relies on the judgment of the Hon’ble Supreme Court in ***Hanuman Laxman Aroskar*** (*supra*), which mandates this Hon’ble Tribunal to undertake a merits review of appeals filed before it.
29. Furthermore, the Hon’ble Supreme Court in Civil Appeal No. 4178/2023 titled **Santosh Kumar Singh v SEIAA and Ors.** vide order dated 25.07.24, has held that it is *“the duty of the NGT to satisfy itself that all the conditions precedent for the grant of environmental clearance were complied with. It is the duty of the NGT to ensure that the environmental clearance is lawfully granted. One of the duties of the NGT is to uphold and preserve the right to a healthy environment guaranteed under Article 21 of the Constitution..”*.

30. That, the Hon'ble Supreme Court in Civil Appeal No. 12122-12123 of 2018 titled **Municipal Corporation of Greater Mumbai v. Ankita Sinha and Ors.** vide order dated 7.10.21, has made the following observations relevant to the jurisdiction of this Hon'ble Tribunal:

"24.5 The NGT is a Tribunal with sui generis characteristic, with the special and all-encompassing jurisdiction to protect the environment. Besides its adjudicatory role as an appellate authority, it is also conferred with the responsibility to discharge role of supervisory body and to decide substantial questions relating to the environment. The necessity of having a specialized body, with the expertise to handle multidimensional environmental issues allows for an all-encompassing framework for environmental justice. The technical expertise that may be required to address evolving environmental concerns would definitely require a flexible institutional mechanism for its effective exercise."

31. Accordingly, the Appellants submit that the submissions regarding ouster of jurisdiction of this Hon'ble Tribunal are untenable in law. Therefore, the contents of paragraph 40 are clearly an attempt by Respondent No. 3 to circumvent addressing the pertinent issues raised by the Appellants regarding assessment of mineral reserves present within the impugned project area. The Appellants submit that the said response of Respondent No. 3 is indicative of a complete absence of valid

justifications on the issue of sparse remaining mineral reserves, and the submissions regarding MMDR Act, 1957 being beyond the jurisdiction of this Hon'ble Tribunal are a bald attempt at misleading this Hon'ble Tribunal, and must be rejected as untenable in law.

32. However, notwithstanding the above-mentioned, the Appellant submits that the present Appeal in Grounds 23-25 has not sought any adjudication on a dispute relating to any provision of the MMDR Act, 1957, or any rule made thereunder, but rather has quoted provisions of statutory law to assist this Hon'ble Tribunal in appraising the contents of the EIA Report prepared for the impugned project, and the subsequent grant of the impugned EC. Therefore, the Appellants submit that the contents of paragraph 40 of reply of R3 ought to be rejected as being entirely arbitrary and untenable in law.
33. Similarly with regards to the contents of paragraph 42 of reply of R3, the Appellants submit that Respondent No. 3 has yet again attempted to mislead this Hon'ble Tribunal by claiming ouster of jurisdiction of this Hon'ble Tribunal. That the contents of paragraph 42 are rejected as being false, misleading, and untenable in law for the above-mentioned reasons.
34. With regards to the contents of paragraph 44, the Appellants reject the same as being false, misleading, and untenable in law.

The Appellant has previously submitted that the said Rule 9A of the MCR 2016 exclusively pertains to transfer of permissions from original lessee to subsequent lessee, and therefore, the said Rule 9A does not apply to the present matter. That the repeated reliance on Rule 9A by Respondent No. 3 is indicative of an attempt to provide a false and misleading interpretation of statutory law, and therefore, the contents of paragraph 44 of reply of R3 are liable to be rejected as false, misleading and untenable in law.

35. That with regards to the contents of paragraph 46 of the reply of R3, the Appellants deny the same as being false, misleading and untenable in law. The Appellants submit that Respondent No. 3 has relied on the order of this Hon'ble Tribunal in Appeal No. 22 of 2022(WZ), to allege that this Hon'ble Tribunal is not competent to adjudicate on the aspect of agricultural tenancy especially since the relevant law is not a Schedule I enactment. The Appellants submit that the said submissions are patently spurious as the Appellants, in the present Appeal, have not sought any adjudication on any issue involving a dispute related to the provisions of the Goa Agricultural Tenancy Act, 1964, but rather have sought to establish / highlight the deliberate misrepresentations and submission of false information by Respondent No. 3 in the impugned EIA Report which ought to have been assessed by the EAC. Thus, the said issues raised by the Appellants are entirely distinct from seeking an adjudication

on title of land, and therefore the quoted order in said Appeal No. 22 of 2022(WZ) has no relevance to the present Appeal.

36. That with regards to the contents of paragraph 47, the Appellants reject the same as being false, misleading, and untenable in law. The Appellants submit that yet again Respondent No. 3 has sought to place reliance on an ouster of jurisdiction of this Hon'ble Tribunal claiming that ownership of land is not a matter relatable to Schedule I enactments. The Appellants state that the said submissions are based on an improper interpretation of the issues raised by the Appellant regarding non-permissibility of use of lands covered by the Goa Agricultural Tenancy Act, 1964, as well as the Goa Land Use Act, 1991 for the impugned project.
37. That the Appellants have submitted that the mining can be carried out for 30 years only upon removal of all encumbrances present in such area. That village settlements and village lands are the only encumbrances within the impugned project area. Therefore, as a logical corollary to the above-mentioned, mining can only be carried out for 30 years if the issue of consent of the land owners is addressed prior to permitting mining for 30 years. Accordingly, the contents of paragraph 47 are wholly false, misleading, and untenable in law and therefore, rejected by the Appellant.

(vi) RISK OF LANDSLIDES NOT SCIENTIFICALLY ASSESSED IN EIA REPORT.

38. With regards to the contents of paragraph 55 of reply of R3, Respondent No. 3 has attempted to respond to submissions made by the Appellants regarding absence of assessment of risk of landslides likely to be caused due to mining in the landslide prone area of Mulgao village wherein the impugned project is located.
39. That in response to such submissions made by the Appellants, Respondent No. 3 has relied on the communications made to the EAC to establish that assessment of landslides has been undertaken in the EIA Report, based on which the EAC in its 24th Meeting has granted the impugned EC. The Appellants reject the same as being false, misleading, and untenable in law. The Appellants submit that a bare perusal of the minutes of the 24th Meeting of the EAC reveal glaring anomalies with regards to information relevant to landslides likely to be caused due to the impugned mining project.
40. That the said minutes of the 24th Meeting, as in Para 11, clearly evidence that Respondent No. 3 themselves have submitted before the EAC that the maximum capacity of garland drains that are to be constructed by Respondent No. 3 will be significantly lower than maximum rainfall run-off in 1 day, i.e., the peak runoff in a day has been mentioned as 110590 m³, whereas the

capacity of the garland drains has been mentioned as 33939 m³, indicating that the peak runoff is over 3 times the maximum capacity of the garland drains.

41. The contentions raised in paragraph no. 36 to 39 of the Appeal have not been satisfactorily answered. It is submitted that there is no reply / response by the respondent no. 3 on why the District Disaster Management Plan for North Goa, 2023 has not been included in the EIA Report and overlooked by the EAC as pointed out in para 37 of the Appeal. True and correct copies of the relevant extracts of the District Disaster Management Plan for North Goa, 2023 along with the relevant extract from the final EIA Report of the impugned project showing survey numbers of the mining lease are hereto marked and annexed as **ANNEXURE – R3/8(colly)**. In response to the statement of Respondent No. 3 that the EAC sub-committee during its inspection did not notice the comunidade lake in Survey no. 69/1, it is submitted that none of the villagers nor comunidade members accompanied the sub-committee during inspection and hence, it could not be pointed out. Moreover, this was raised during the public hearing vide letter dated 31.07.2023 by Village Panchayat Mulgao (Annexure-A17 at Pg. 185, Annexure-A18 at Pg. 189 and Annexure-A22 at Pg. 196) and should have been deliberated upon by the EAC before grant of impugned EC. Accordingly, the Appellants submit that the existence of such rudimentary lapses in the EIA Report are indicative of a failure to prepare the EIA

Report in the scientifically rigorous manner that is envisioned by the EIA Notification, 2006. Furthermore, an oversight by the EAC in appropriately appraising the data contained in the EIA Report is especially concerning given the specific submissions raised by the Appellant regarding likelihood of flooding in the area, and indicate a complete absence of independent application of mind by the EAC.

(vii) THE CORPORATE VEIL MUST BE PIERCED IN THE INSTANT MATTER:

42. With regards to the contents of paragraph 43 of reply of R3, Respondent No. 3 has sought to address the submissions raised by the Appellant regarding concealment of mining previously done in the same mining lease by a subsidiary company wholly owned by Respondent No. 3. That Respondent No. 3 has stated that the said submissions of the Appellants is premised on a complete ignorance of elementary company law jurisprudence and that Respondent No. 3 has disclosed that the mine was previously operated by Sesa Mining Corporation Ltd.

43. That the said contents of paragraph 43 are rejected as false, misleading, and untenable in law. That the Appellants rely on the order of the Hon'ble Supreme Court in **State of U.P. and Ors. v. Renusagar Power Co. and Ors. reported in 1988 AIR 1737**, wherein it laid down the law that the lifting of corporate

veil is permissible, and can be done if two corporate entities are so inextricably linked together, so much so, that the subsidiary company has no separate and independent existence apart from the parent company.

44. Accordingly, the Appellants submit that the present matter falls squarely within the accepted jurisprudence of piercing of the corporate veil, and accordingly, it is stated that the detailed past history of mining violations caused by Sesa Mining Corporation Ltd., being wholly owned and operated by Respondent No. 3, is relevant information that ought to have been sought by the EAC and submitted by Respondent No. 3.

45. However, deliberate concealment by Respondent No. 3 regarding such information, as well as failure of the EAC to independently apply its mind to ensuring piercing of the corporate veil in the present matter is indicative of glaring lapses in adherence to procedure established by EIA Notification, 2006.

(viii) RESPONDENT NO. 3 MADE FALSE STATEMENT ABOUT OWNING ROAD AND ALSO CHANGED TRANSPORTATION ROUTE AS APPROVED UNDER THE EC:

46. The contentions raised in paras 46 to 52 pertaining to adjudication of the issue of ore transportation by the High Court results in ousting the jurisdiction of this Hon'ble Tribunal is wrong interpretation of the settled law as explained in para 2.10 of this

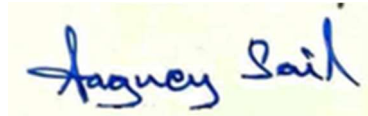
rejoinder. It is clarified that in para 32 of the present Appeal, the incorrect and misleading statement made by the Respondent No. 3 that the road outside the lease area admeasuring 4.64 kms is 'company owned dedicated road' (refer to para vii. of Annexure 2 of the impugned EC at pg. 87-88 of the Appeal) is made for the limited purpose of cancellation of the impugned EC in terms of para 8(vi) of the EIA Notification, 2006 which pertains to deliberate concealment of information. That 550m of this 4.64kms of company owned road is in reality is located in parent Survey nos. 162, 184, 164 and 154 of Tiligao Village, Bicholim Taluka and is part of tenanted agricultural land. This aspect is proved by the latest High Court order dated 13.02.2025 which is **ANNEXURE-R3/9**.

(ix) NO RESPONSE TO WHY PUBLIC HEARING WAS HELD 12 KMS AWAY FROM THE VILLAGE AND WHY IT CONTINUED TILL 0130AM ON 12.08.2023:

47. That the Respondent No. 3 in paras 66 to 72 have chosen not to respond to the contention raised in the Appeal as the why the public hearing site was chosen to be 12 kms away from the affected village site where no arrangement of water or food was made and why was it allowed to continue from 1030am on 11.08.2023 till 0130am on 12.08.2023. Other contentions raised in Ground E of the Appeal (Paras 47 to 50) have also not been responded to by the Respondent No. 3.

48. That in light of the above stated rejoinder and the issues raised in the present Appeal, it is most respectfully prayed that this Hon'ble Tribunal may kindly grant the prayers sought in the present Appeal.

**APPELLANTS
THROUGH**

A handwritten signature in blue ink that reads "Aagney Sail". The signature is written in a cursive style and is placed on a light yellow rectangular background.

Mr. Aagney Sail, Mr. Om Anthony D'Costa
& Mr. Maitreya P. Ghorpade.

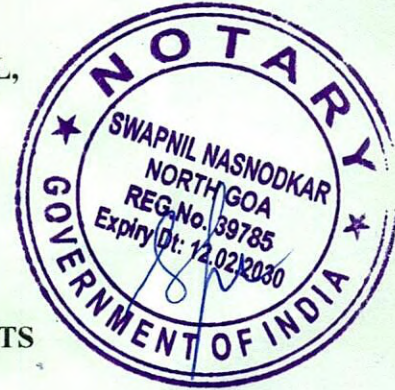
ADVOCATES FOR THE APPELLANTS

Comtech Services Centre, 604, VI Floor,
Unitech's City Centre, MG Road, Panaji, Goa 403001.
Phone: 09810076618, 08007558624 & 07024102546
Email: aagneysail@gmail.com, dcostaom@gmail.com &
maitreya.ghorpade@gmail.com

PLACE: Mapusa, Goa.

FILED ON: 20.03.2025

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH AT PUNE
APPEAL NO. 73 OF 2024 [WZ]



IN THE MATTER OF:

SWAPNESH SHERLEKAR AND ORS.

...APPELLANTS

AND

MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE AND
ORS.

...RESPONDENTS

AFFIDAVIT

I, Swapnesh Bhanudas Sherlekar, aged about 40 years, S/o Late Bhanudas Anant Sherlekar, R/o H.No. 284, Shivolkarwada, Mulgao, P.O. Bicholim, Goa – 403503, do hereby solemnly affirm and state as under:

1. That I am the above named Appellant No. 1 and am conversant with present case hence competent to swear this affidavit. I am authorized to swear this affidavit on behalf of the other Appellants No. 2 to 5.
2. I verify that the contents of the accompanying Rejoinder to the Reply of Respondent No. 3 which has been drafted as per my instructions and the contents of which are true to my own knowledge and belief which I believe to be true and correct. No part of it is false and nothing material has been concealed therefrom.
3. That the Annexures R3/1 to R3/ to the rejoinder are true and correct copies of their respective originals.

BEFORE ME

Swapnil Nasnodkar
15/3/2025
SWAPNIL NASNODKAR
ADVOCATE & NOTARY
NORTH GOA
601, 6th Floor Unitech City Centre,
M.G. Road, Panaji-Goa

[Signature]
DEPONENT

VERIFICATION

I hereby verify that the contents of paras 1 - 3 of my above affidavit are true to my knowledge and belief, and that no part of it is false and nothing material has been concealed therefrom.

[Signature]
DEPONENT

[Signature] Verified on the 18th day of
March, 2025 at Mapusa, Goa



Solemnly affirmed before me by
 Shri/Smt SWAPNESH SHERLEKAR
Rjat H. No. 284, SHIVOLKAR WADA
MULGAO BICHOLIM
 who has been identified by EPIC
 CARD No. SPV.0278135
 personally known to me.
 Reg No 139/2025
 Dated 11.8.MAR.2025

Swapnil Nasnodkar
 SWAPNIL JANKUMAR NASNODKAR
 ADVOCATE & NOTARY
 NORTH GOA
 GOVERNMENT OF INDIA

BEFORE ME

SWAPNIL NASNODKAR
 ADVOCATE & NOTARY
 NORTH GOA
 801, 8th Floor, United City Centre,
 M.G. Road, Panaji-Goa

270312/2020/IA_III

F.No. 22-2/2020-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

ParyavaranBhawan,
Jor Bagh, Aliganj New Delhi – 110003
e-mail: sharath.kr@gov.in
Date: 29th April, 2020


Subject: Pr-embedded prior Environmental/Forest Clearance for the identified mineral block with proven reserves (proposed mining lease areas)– regarding

This is in reference to the discussion with Ministry of Mines dated 13.03.2020 and subsequent DO letter of Secretary (Mines), Government of India, vide D.O. No. 6/4/2020-M.VI, dated 24.01.2020 and 16.03.2020 regarding auctioning of mineral blocks with per-embedded clearances.

The matter has been examined in the Ministry and it is to inform that State Governments/Union Territory administrations, after identifying the mineral blocks with proven reserves, may apply as project proponent, seeking prior environmental clearance (EC) under the provisions of Environmental Impact Assessment Notification, 2006. The States/UTs concerned, after obtaining such prior environmental clearance from the Ministry or SEIAA, as the case may be, may transfer the said prior-EC to a new user agency (successful bidder holding Letter of Intent), identified by the States/UTs through the process of auctioning or any other legitimate means, as per the provisions of Clause 11 of EIA Notification, 2006.

Similarly, it is also informed that the existing provisions under Forest (Conservation) Act, 1980 provides for State Governments/Union Territory administration to apply as User agencies seeking prior approval for use of forest land for non-forestry purposes in respect of identified mineral blocks. After obtaining such approval, State Governments/Union Territory administrations may transfer the said approval as per the relevant provisions under Forest (Conservation) Act, 1980, and Rules & Guidelines made there under, to a new user agency (successful bidder holding Letter of Intent), identified by the States/UTs through the process of auctioning or any other process as prescribed by the government.

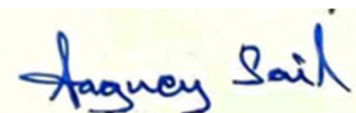
This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Scientist 'F'/Director
IA (Policy)

To
Secretary, Ministry of Mines, Government of India

Copy to:

1. PPS to Secretary, EF&CC
2. PPS to DGF&SS, MoEF&CC



-- TRUE COPY --

ANNEXURE R3/2

By e-mail

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE REGIONAL CONTROLLER OF MINES, GOA**

No. MCDR-MPC/1/2023-GOA-IBM_RO_GOA

Dt: 26/05/2023

Shri/M/s. Vedanta Limited ,
Sesa Ghor, EDC complex, Patto - Panaji Tiswadi

BLOCK I BICHOLIM MINERAL BLOCK (PB49)

Sub Approval of Review and Mining Plan in respect of your Mining Lease Area for Iron Ore over an area of 478.5206 Ha. situated in
: Langao Village, Bicholim Taluka, North Goa District of Goa State.

Ref : (i) Receipt of draft Mining Plan in respect of aforesaid Block in MPAS Portal on 23.02.2023.

(ii) This office scrutiny comments on the examination of the draft copy of the Mining plan sent through the MPAS portal of MTS on 10.05.2022.

(iii) Online submission of the modified document i.r.o. aforesaid block on MPAS Portal on 24.05.2023.

Sir,

In exercise of the powers conferred by clause (b) of sub-section (2) of section 5 of the Mines & Minerals (Development & Regulation) Act, 1957 read with Government of India Order No. S.O.1857(E) dated 18.05.2016; and in the exercise of the powers conferred under sub-rule (3) of Rule 16 of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, I hereby **approve** the Mining Plan with Progressive Mine Closure Plan in respect of your Block No. I Bicholim Mineral Block over an extent of 478.5206 Ha. situated in Langao Village of Bicholim Taluka, North Goa District of Goa State submitted under Rule 16(1) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules 2016. This approval is subject to the following conditions:

1. That the Mining Plan is approved without prejudice to any other Law applicable to the mine area from time to time whether made by the Central Government, State Government, or any other authority, and without prejudice to any order or direction from any court of competent jurisdiction.
2. The proposals shown on the plates and/or given in the document are based on the auctioned Mineral Block/lease map/sketch submitted by the applicant/lessee and are applicable from the date of approval.
3. It is clarified that the approval of the aforesaid Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines & Minerals (Development & Regulation) Act, 1957 or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rules and Regulations made thereunder.
4. Indian Bureau of Mines has not undertaken verification of the auctioned Mineral Block/ Mining Lease Boundary on the ground and does not undertake any responsibility regarding the correctness of the boundaries of the Mineral Block/leasehold shown on the ground with reference to the lease map & other plans furnished by the applicant.
5. At any stage, if it is observed that the information furnished, or data incorporated in the document is incorrect or misrepresents facts, the approval of the document shall be revoked with immediate effect.

6. If the approval conflicts with any other law or court order/direction under any statute, it shall be revoked immediately.
7. Terms and conditions of the Mine Development and Production Agreement (MDPA), whenever signed with State Govt; shall be complied with. The preferred bidder shall submit a copy of the Mine Development & Production Agreement & Mining lease deed executed with the State Govt. to this office within 15 days of their execution along with a copy of Performance Security furnished.
8. The Preferred bidder has to comply with the terms & conditions laid down in the LOI issued by the State Govt. If any comments are received from the State Govt., then the necessary action as per comments shall be taken immediately.
9. It shall be mandatory for the project proponent, abstracting groundwater to obtain a No Objection Certificate from Central Ground Water Authority or the Goa State Ground Water Authority.
10. The preferred bidder of the auctioned block shall complete detailed exploration (G1 level exploration) over the potential mineralized area in accordance with Rule 12(4) of MCDR Amendment rules 2021 (notified dated 03.11.2021) and prepare a detailed feasibility study report conforming to Part IV and V of the Mineral (Evidence of Mineral Contents) Rules, 2015 over the entire area; within five years from the date of commencement of such mining lease.

BLOCK I BICHOLIM MINERAL BLOCK (PB49)

Yours faithfully,

(Naresh Kumar Kataria)

Deputy Controller of Mines & Officer In charge

Indian Bureau of Mines, Goa

Copy forwarded for information to:

1. The Controller of Mines (SZ), Indian Bureau of Mines, Bangalore.
2. The Director, Directorate of Mines & Geology, Institute of Menezes Braganza Bldg, Panaji, Goa 403001.
3. Technical Persons: S/Shri. Mahesh Patankar, Devendra Gupta, Suraj Dhawaskar

(email ID: Mahesh.patankar@vedanta.co.in; gupta.devendra@vedanta.co.in; suraj.dhawaskar@vedanta.co.in)

(Naresh Kumar Kataria)

Deputy Controller of Mines & Officer In charge

Chapter 1 : General Information

1.1 : Lease Details

IBM Registration Number :	IBM/327/2011
Lease Code :	PB49
Mine Code :	Nil
Name of Lessee :	Vedanta Limited
Address of Lessee :	Sesa Ghor, EDC Complex, Patto - Panaji Tiswadi
Type of Lessee :	Private
Name of Mining Lease :	BLOCK I BICHOLIM MINERAL BLOCK
State :	GOA
District :	NORTH GOA
Tehsil/ Taluk/ Mandal :	Bicholim
Village :	Langao
Lease Area (Ha) :	478.5206
Forest Area (Ha) :	0.0000
Name of Minerals :	IRON ORE
Name of associated minerals :	

Type :	Fresh Grant
Period of the proposal (FY) from :	Nil
Period of the proposal (FY) to :	Nil
Type of working :	Opencast
Nature of Use :	Non Captive
Category of Mine :	Category A

1.1.1 : Initial/subsequent Lease grant details

Grant	From	To	Lease deed execution date	Lease registration date
Nil	Nil	Nil	Nil	Nil

1.1.2 : Mining Plan Submission Criteria Details

Type of Document :	Mining Plan Under Rule 16(1) Of MCR 2016
LOI Number :	DMG/25/Auction Cell/LOI-function/2023/2801
Date :	13/01/2023

1.2 : Land Ownership Details

View Land Ownership Details Excel	Land Ownership details.xlsx
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1.3 : Existing Lease

Date of Execution :	Nil
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1.3.1 : Approval of earlier Mining Plan & Its Subsequent Review in Chronological Order

S.N.	Letter Number	Date	Period		Type Of Approved Document	Remark
			From	To		
1	Nil	Nil	Nil	Nil	Nil	NA

1.3.2 : Partial Surrenderd Area During Stages of Operations in Chronological Order

Sr.no	Date	Supplementary Surrender order / Letter Number	Supplementary Lease Deed Date	Final Retained Area over which current Mining Plan is Prepared (ha)
1	Nil	Nil	Nil	Nil

1.3.3 : Transfer of Lease Area Subsequent to Grant

Not Applicable

1.3.4 : Statutory Compliances**1.3.4.1 : Environment Clearance**

Applicable :	No
Letter No :	Nil
Date :	Nil
Validity :	Nil

ROM Mineral :	Nil
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1.3.4.2 : SPCB Approvals

Letter No :	Nil
Approval of :	Nil
Date :	Nil
Validity :	Nil
ROM Mineral :	Nil

1.3.4.3 : Forest Clearance

Applicable :	No
Letter No :	Nil
Date :	Nil
Validity :	Nil
Area (Ha) :	Nil

1.3.4.4 : Land Acquisition Details

Total Area Acquired in hectare:	249.3368
Total Amount Paid (INR) :	209654848.0000

1.3.5 : Mine Location Details

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Toposheet Number :	48 E/14
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1.3.5.1 : Location of Boundary Pillars

View Location of Boundary Pillars Excel	Boundary Pillar Details.xlsx
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1.3.6 : Owner/Nominated Owner Details

Name	PAN of owner / Nominated Owner	Address of owner/ Nominated Owner	Mobile Number	Email	Please attach Minutes of Board Resolution in case of Nominated Owner
Dhirajkumar Jagdish	AHSPJ7255M	Sesa Ghor EDC Complex Patto Panaji Goa	7798984627	dhirajkumar.jagdish@vedanta.co.in	VL Nominated Owner Board Resolution 130123 .pdf

1.3.7 : Qualified Person Details as per M(OAHCEM)CR, 2016

S.N.	Prefix	Name	PAN of QP	Address	Mobile no.	Qualification	Exp in years as prescribed under the rule	Email
1	Mr	Dhirajkumar Jagdish	AHSPJ7255M	Vedanta Ltd, 20 - EDC Complex, Patto, Panaji - 403001, Goa	7798984627	BE Mining	18	dhirajkumar.jagdish@vedanta.co.in
2	Mr	Mahesh Patankar	AGZPP9262E	Vedanta Ltd, 20 - EDC Complex, Patto, Panaji - 403001, Goa	9423319282	MSc Geology	26	mahesh.patankar@vedanta.co.in
3	Mr	Devendra Gupta	ANLPG4790M	Vedanta Ltd, 20 - EDC Complex, Patto, Panaji - 403001, Goa	7798984624	MscTech Applied Geology	15	gupta.devendra@vedanta.co.in
4	Mr	Suraj Dhawaskar	ASBPD8531C	Vedanta Ltd, 20 - EDC Complex,	7507658714	MSc Geology	15	suraj.dhawaskar@vedanta.co.in

				Patto, Panaji - 403001, Goa				
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Approved

Chapter 2A : Geology & Exploration

2A.1 : Geology

2A.1.1 : Topography

Terrain :	Undulating
Highest Level (m) from MSL :	169.1400
Lowest Level (m) from MSL :	-37.2400
Average Level (m) from MSL :	60.0000
Drainage Pattern :	Dendritic
Order of Stream :	Order 1
Min Dist of Stream from Lease Area(m) :	0.0000

2A.1.2 : Details of Physiographic features and Infrastructures available in and around the lease/ block area

Description	Location if existing Within the lease/block area	Distance from boundary periphery in kms, if existing outside the lease/block area. (within 5.00Kms)	Remark if any
River/Nallah/Reservoir	NA	0.0KM (Assanora river)	Just touching the Block boundary
Public roads (Tar road, cart road)	Tar Road (386513.18 m E, 1723265.18 m N)	NA	NA
Railway track	NA	1.11km (381233.35 m E, 1725939.09 m N)	S.Western
Human settlements	Lamgao village (386066.40 m E, 1723990.93 m N) & Mulgao village(384251.70 m E, 1726020.13 m N)	NA	Lamgaon, Mulgaon
Archaeological monuments/ places of worships/public utilities etc	Idgah (387023.64 m E, 1723025.74 m N)	NA	NA

Wild life sanctuaries/ national parks	Nil	0	NA
Coastal Regulation Zone (CRZ)	Nil	0	Nil
Powertransmission lines/telephone lines	Nil	0	Nil
Firing range	Nil	0	Nil
Ordinance factory	Nil	0	Nil
grazing land/ burial ground or cremation ground	Bicholim Crematorium Yards(387132.48 m E, 1722935.63 m N)	Lamgaon Crematorium - 0.1KM (386516.39 m E, 1723519.47 m N)	Crematorium
Any other specify	Nil	0	Nil

Particulars	Distance from lease boundary in kms
Near by village	0.16
Nearest Railway station	4.78
Nearest Port	53.00
Distance of SH/NH from lease area	0.31

2A.1.3 : Regional Geology

Regional Geology
<p>Goa is dominantly covered by the rocks belonging to Dharwar Supergroup of Archean-Proterozoic age, except for a narrow strip along the North-eastern corner occupied by the Deccan Traps of Upper Cretaceous to Lower Eocene age. Iron Ore Formations of Goa indicate two successive and transitional epochs and environments of deposition. Based on the prominent structural discordance and environment of deposition, the Goan Iron Ore Formations can be broadly categorized into two formations namely, North Goa and South Goa Formations. Precambrians at North Goa form the extension of Dharwar Formations noted in Karnataka. This forms a part and continuation of a major geosyncline, showing a general NNW-SSE elongation. Evolution of geosyncline is accompanied by sub-marine volcanism represented by metavolcanics. This is followed by the deposition of Metagreywacke and Tilloid. Furthermore, the submarine volcanism and Greywacke deposition is accompanied by the deposition of Ferruginous Quartzite mainly along the borders of geosyncline. The evolutionary stage ends up with three phases of folding, metamorphism and basic intrusions. The impressions of these folding are marked in North Goa Iron Ore Formations. Dharwar super group of rocks in Goa are locally named as Goa group of rocks which have characteristic NNW-SSE strike and dips are moderate. Of the above, Bicholim formation has pink phyllite horizon with banded ferruginous and manganiferous quartzite constitute the economically minable manganese and iron ore bearing horizon and extends over the entire length of Goa from north to south. Litho units are highly folded and the rocks have attained green schist facies grade of metamorphism. Extensive development of laterite in the form of capping over the rocks is seen and further, the rocks show the effect of deep weathering.</p>

2A.1.4 : Local Geology & Structure**2A.1.4.1 : Local Geological Set-up**

As per Geological Survey of India (GSI) studies, Bicholim Mine area comes under Bicholim-Sirigao type Deposit. The deposit consists of two ore bands running nearly parallel to each other, in which the South-western ore band (Top) is larger extends for a length of 6.5Kms, has width 20 to 45m and North-eastern ore band is comparatively smaller extends over a length of 2Kms which also has 30 to 60m widths. The south-western ore band is in the shape of S and it occurs on the overturned south-western limb of the anticlinal fold and also on the refolded nose portion of the fold. The north-eastern ore band occurs on the other limb of the fold. Both the ore bands occur along the dip slope. Between the two limbs of anticlinal fold, which are ore bearing; there is a barren phyllite occurring, about 250m wide, which represents the axial portion of the fold. The mineral deposit extends over strike length of 7km in at 50 to 60 degree NW-SE direction. The mineralisation occurs in the form of bands dipping at 45 to 70 due NE occupying slopes of the hillocks. Thickness of the strata exposed in the mine varies from place. The average thickness of different litho units is as below; Laterite 10 to 15m Lumpy Laterite 05 to 10m Friable Powdery Ores 20 to 45m Limonitic Clays 5 to 10m Phyllite Clays 30 to 100m Manganiferous Clays 10 to 30m Intrusive / Dykes 02 to 15m Litho units are highly folded and the rocks have attained green schist facies grade of metamorphism. The rocks show the effect of deep weathering. Generally, phyllite clays are found along the strike length at footwall sides and phyllite, manganiferous clays and limonitic clays are found at hang wall sides. Banded Hematite Quartzite and QuartzChlorite-Schist are found in deeper sections. There are many basic intrusive/ dykes cutting across strike length, which are deeply weathered, occur in the form of variegated soft clays.

2A.1.4.2 : Structure

The rock formations in the area indicate a major overturned anticlinal fold extending over the length of about 6.5km along the NW-SE strike direction and plunging about 27degrees towards Northwest. Entire crest portions of the anticline are eroded away in the past leaving behind two huge limbs of the folds. Both the limbs are steeply dipping /inclined towards North East. Lithounits within the major fold exhibit complex and tight folding. The area has undergone multiple basic igneous intrusions indicated by presence of many dikes and sills cutting across the strike length. Iron ore occur in the limbs of the folds in the hill slopes.

2A.1.4.3 : Lithology, Petrographic & Mineralogical Description for Major, Associated & Indicator Minerals

Entire area is covered with laterites. Lateritic Lumpy ores found occurring over the Banded Iron Formations at surface. Iron ores comprise of Hematite as major mineral, Limonite, Goethite and Martite being minor minerals. Silica, Alumina and Manganese occur as associated gangue minerals. Phyllite and Manganiferous clays present on either side of the ore bands as well as intercalations within the ore beds. Deeper sections of the area has BHQs and presence of Siliceous Ores in smaller quantities followed by Quartz-Chlorite-Biotite-Schists at bottoms.

2A.1.4.4 : Mode of Occurance & Controls of Mineralization

Iron ore generally found to occur as soft banded beds in the Precambrian metasedimentary formation. Hard lumpy ores occur close to surface in Laterites 5 to 10m depth followed by soft laminated and friable powdery ores (blue dust) in deeper portions. Iron ore mineralization is controlled by structural folds, limbs of the folds and topographic hill slopes.

2A.1.4.5 : Extent of Weathering/ Alteration

Precambrian metavolcanic sediments in the area have undergone greenschist facies metamorphism represented by deep weathering and alterations more than 100m in depth. BHQ and BMQs have undergone deep oxidation and supergene enrichment of Iron oxides. Almost intrusive have been deeply weathered and altered to various types of variegated clays. Magnetite is altered to Martite a pseudomorph of Hematite mineral Most of the schists have been weathered and altered to clays.

2A.1.4.6 : Nature/Form of Mineral	Powdery
Specify If any other	Friable ,Flaky and Lumpy

2A.1.4.7 : Extent of Mineralization

The deposit consists of two ore bands running nearly parallel to each other, in which the South-western ore band (Top) is larger extends for a length of 6.5Kms, has width 20 to 45m and North-eastern ore band is comparatively smaller extends over a length of 2Kms which also has 30 to 60m widths. Both ore bands occur on the two limbs of the anticlinal fold and along the dip slopes. Lateritic lumpy ores occur at surfaces up to 10m depth. Powdery ores extend over 200m depth. The mineralisation occurs in the form of bands dipping at 45 to 70 due NE occupying slopes of the hillocks depths extending more than 100m in several sections.

2A.1.4.8 : Deposit Type (as per MEMC Rule)

Iron ore deposit in the area is found to be bedded, stratiform type deposits of regular habit as per MEMC Rule.

Strike / Trend of the Ore Body

N	50	W	to	S	50	E
---	----	---	----	---	----	---

Amount of Dip of the Ore Body (degree)

Amount of Dip of the Ore Body (degree)

45

70

(from)

(to)

Dip Direction of the Ore BodyPlunge of Mineral Body
(degree) (if any)

Direction of Plunge

N	50	E	27	N	60	W
---	----	---	----	---	----	---

2A.2: Exploration**2A.2.1: Summary of The Previous Exploration (for fresh grant) / During Last Plan Period (for existing leases)**

Name of The Agency
Sesa Mining corporation Ltd. Goa.(Erstwhile Lessee)

2A.2.1.1: Geological Mapping

SI.No.	Year		Scale	Area Covered (Ha)
	From	To		
1	01/04/2017	31/03/2018	1:2000	478.5206

2A.2.1.2: Airborne Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					Form	To	Form	To
1	NIL	0	0.00	0.0000	Nil	Nil	Nil	Nil

2A.2.1.3: Ground Geophysical Survey

SI.No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
					Form	To	Form	To
1	Nil	0	0	0.0000	Nil	Nil	Nil	Nil

2A.2.1.4: Geochemical Survey

SI.No.	Type of Sample	No of Samples	Aanalysis report	Area Covered (Ha)
1	Nil	0	Nil	Nil

2A.2.1.5: Pitting

Number of Pits																
0																
SI.No.	Year		Pit ID	Length of Pit (m)	Width of Pit (m)	Depth of Pit (m)	Depth (from)	Depth(to)	Running mtr	Litho units exposed	Name of the radical	Av Grade(in %)	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
	From	To											From	To	From	To
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

2A.2.1.6: Trenching

Number of Trenches															
0															

2A.2.1.6.1: Spacing

Min (m)						Max (m)						Avg (m)				
Nil						Nil						Nil				
SI.No.	Year		Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench (m)	Depth (from)	Depth(to)	Running mtr	Litho units exposed	Name of the radical	Av. Grade	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)	
	From	To											From	To	From	To
1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

2A.2.1.7 Exploratory Drilling(Core/non Core)

SI.No.	Year	Exploration agency	Core holes	Non-core (RC/DTH)	Grand total	Attach log sheet of each borehole in

	From	To		Number of boreholes drilled	Total mtrs	Number of boreholes drilled	Total mtrs	Number of boreholes drilled	Total mtrs	csv/excel format
1	07/07/1969	19/12/2017	Sesa Mining Corporation Limited	1153	97320.60	0	0.00	1153	97320.60	Bicholim-BH-Litho.xlsx

2A.2.1.8: Exploratory Mining

SI.No.	Pit/Adit ID	Length in Mtr	Width in Mtr	Depth in mtrs	Volume (m ³)
1	Nil	0.00	0.00	0.00	0.00

2A.2.1.9: Sampling

SI.No.	Type of sample	No of samples collected	Number of samples analyzed	Latitude (dd:mm:ss.ss)		Longitude (dd:mm:ss.ss)		Remark if any
				From	To	From	To	
1	Drill Core	27633	26896	15:36:45.71	15:34:26.56	73:54:10.03	73:57:05.26	NIL

2A.2.1.10: Chemical Analysis

SI.No.	Sample ID	Minerals	Radical with garde in %	Name of Agency	Type of agency	Attachment
1	BIC0016 to BIDD1388	Iron ore and Waste	Fe%,Sio2%, Al2O3% & Mn%	Sesa Resources Limited, Bicholim Goa and others	NABL accredited	Bicholim_BH_List.xlsx

* Chemical analysis of core /non vore samples may be uploaded in CSV file which shall normally include Five files namely collar file, survey file and Geology log file, Assay file & RQD File.

2A.2.1.11: Petrology & Mineralogical Studies

SI.No.	Type of Sample	Number of Sample Drawn	Number of Sample Analyzed	Petrographic Study Report
1	None	0	0	Nil

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HOLE_ID	SAMP_ID	FROM	TO	GEOLOGY
BIC0016	BIC16_1	0.00	1.00	POWDERY IRON ORE
BIC0016	BIC16_2	1.00	1.50	POWDERY IRON ORE
BIC0016	BIC16_3	1.50	2.00	PHYLITIC CLAY
BIC0016	BIC16_4	2.00	3.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_5	3.00	3.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_6	3.50	4.00	PHYLITIC CLAY
BIC0016	BIC16_7	4.00	4.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_8	4.50	5.00	PHYLITIC CLAY
BIC0016	BIC16_9	5.00	6.00	BHQ/BMQ
BIC0016	BIC16_10	6.00	8.00	BHQ/BMQ
BIC0016	BIC16_11	8.00	10.00	SILICEOUS ORE
BIC0016	BIC16_12	10.00	12.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_13	12.00	14.00	SILICEOUS ORE
BIC0016	BIC16_14	14.00	16.00	SILICEOUS ORE
BIC0016	BIC16_15	16.00	18.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_16	18.00	19.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_17	19.00	21.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0016	BIC16_18	21.00	23.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_1	0.00	1.00	POWDERY IRON ORE
BIC0020	BIC20_2	1.00	2.50	POWDERY IRON ORE
BIC0020	BIC20_3	2.50	3.50	POWDERY IRON ORE
BIC0020	BIC20_4	3.50	4.00	POWDERY IRON ORE
BIC0020	BIC20_5	4.00	4.50	POWDERY IRON ORE
BIC0020	BIC20_6	4.50	5.00	POWDERY IRON ORE
BIC0020	BIC20_7	5.00	5.50	POWDERY IRON ORE
BIC0020	BIC20_8	5.50	6.00	POWDERY IRON ORE
BIC0020	BIC20_9	6.00	6.50	POWDERY IRON ORE
BIC0020	BIC20_10	6.50	7.50	POWDERY IRON ORE
BIC0020	BIC20_11	7.50	8.50	POWDERY IRON ORE
BIC0020	BIC20_12	8.50	9.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_13	9.50	10.50	POWDERY IRON ORE
BIC0020	BIC20_14	10.50	11.00	POWDERY IRON ORE
BIC0020	BIC20_15	11.00	11.50	POWDERY IRON ORE
BIC0020	BIC20_16	11.50	12.00	POWDERY IRON ORE
BIC0020	BIC20_17	12.00	12.50	POWDERY IRON ORE
BIC0020	BIC20_18	12.50	13.50	POWDERY IRON ORE
BIC0020	BIC20_19	13.50	14.50	POWDERY IRON ORE
BIC0020	BIC20_20	14.50	15.50	POWDERY IRON ORE
BIC0020	BIC20_21	15.50	16.50	POWDERY IRON ORE
BIC0020	BIC20_22	16.50	17.50	POWDERY IRON ORE
BIC0020	BIC20_23	17.50	18.50	POWDERY IRON ORE
BIC0020	BIC20_24	18.50	19.50	POWDERY IRON ORE
BIC0020	BIC20_25	19.50	20.50	POWDERY IRON ORE
BIC0020	BIC20_26	20.50	21.50	POWDERY IRON ORE
BIC0020	BIC20_27	21.50	22.50	POWDERY IRON ORE
BIC0020	BIC20_28	22.50	23.00	POWDERY IRON ORE
BIC0020	BIC20_29	23.00	23.50	POWDERY IRON ORE
BIC0020	BIC20_30	23.50	24.00	POWDERY IRON ORE
BIC0020	BIC20_31	24.00	24.50	POWDERY IRON ORE

BIC0020	BIC20_32	24.50	25.00	POWDERY IRON ORE
BIC0020	BIC20_33	25.00	25.50	POWDERY IRON ORE
BIC0020	BIC20_34	25.50	26.00	POWDERY IRON ORE
BIC0020	BIC20_35	26.00	26.50	POWDERY IRON ORE
BIC0020	BIC20_36	26.50	27.00	POWDERY IRON ORE
BIC0020	BIC20_37	27.00	27.50	POWDERY IRON ORE
BIC0020	BIC20_38	27.50	28.00	POWDERY IRON ORE
BIC0020	BIC20_39	28.00	28.50	POWDERY IRON ORE
BIC0020	BIC20_40	28.50	29.00	POWDERY IRON ORE
BIC0020	BIC20_41	29.00	29.50	POWDERY IRON ORE
BIC0020	BIC20_42	29.50	31.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_43	31.00	32.50	POWDERY IRON ORE
BIC0020	BIC20_44	32.50	33.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_45	33.50	35.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_46	35.50	37.50	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0020	BIC20_47	37.50	39.50	PHYLITIC CLAY
BIC0021	BIC21_1	0.00	1.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0021	BIC21_2	1.00	1.50	LATERITE
BIC0021	BIC21_3	1.50	3.00	LATERITE
BIC0021	BIC21_4	3.00	4.00	LATERITE
BIC0021	BIC21_5	4.00	4.50	POWDERY IRON ORE
BIC0021	BIC21_6	4.50	5.00	LATERITIC LUMPY ORE
BIC0021	BIC21_7	5.00	5.50	LATERITIC LUMPY ORE
BIC0021	BIC21_8	5.50	6.00	POWDERY IRON ORE
BIC0021	BIC21_9	6.00	7.00	POWDERY IRON ORE
BIC0021	BIC21_10	7.00	8.00	LATERITIC LUMPY ORE
BIC0021	BIC21_11	8.00	9.00	LATERITE
BIC0021	BIC21_12	9.00	11.00	PHYLITIC CLAY
BIC0021	BIC21_13	11.00	13.00	PHYLITIC CLAY
BIC0021	BIC21_14	13.00	16.00	PHYLITIC CLAY
BIC0021	BIC21_15	16.00	17.00	LATERITE
BIC0021	BIC21_16	17.00	18.00	LATERITE
BIC0021	BIC21_17	18.00	20.00	MANGANIFEROUS CLAY
BIC0021	BIC21_18	20.00	22.00	MANGANIFEROUS CLAY
BIC0021	BIC21_19	22.00	22.50	POWDERY IRON ORE
BIC0021	BIC21_20	22.50	26.50	PHYLITIC CLAY
BIC0022	BIC22_1	0.00	3.00	LATERITIC LUMPY ORE
BIC0022	BIC22_2	3.00	5.00	LATERITIC LUMPY ORE
BIC0022	BIC22_3	5.00	6.00	LATERITIC LUMPY ORE
BIC0022	BIC22_4	6.00	7.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0022	BIC22_5	7.00	8.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0022	BIC22_6	8.00	9.00	PHYLITIC CLAY
BIC0022	BIC22_7	9.00	10.00	PHYLITIC CLAY
BIC0022	BIC22_8	10.00	11.00	LATERITE
BIC0022	BIC22_9	11.00	12.00	LATERITE
BIC0022	BIC22_10	12.00	13.00	LATERITE
BIC0022	BIC22_11	13.00	14.00	PHYLITIC CLAY
BIC0022	BIC22_12	14.00	16.00	PHYLITIC CLAY
BIC0022	BIC22_13	16.00	18.00	FERRUGINOUS CLAY/TRANSITIONAL ORE
BIC0022	BIC22_14	18.00	20.00	FERRUGINOUS CLAY/TRANSITIONAL ORE

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(NON-COAL MINING SECTOR)

AGENDA FOR 14th EAC MEETING OF THE EXPERT APPRAISAL COMMITTEE (NON-COAL MINING SECTOR), SCHEDULED TO BE HELD DURING 3-4 MAY, 2023 THROUGH VIDEO CONFERENCE.

Instructions: Project Proponents are requested to strictly follow the following instructions:

1. It is requested that the project proponent or his/her authorized representative should participate in EAC meeting through Video Conferencing only (preferably not more than two representatives) who can make a presentation on their behalf on the salient features of the project, the related environmental issues, proposed Environmental Management Plan, commitment made during public hearing, CER, occupational health plan, plantation plan, method of mining, beneficiation activities, transportation plan, R&R issues and also respond to the queries/suggestions of the Committee.
2. NIC, MoEF&CC will moderate the Video Conferencing meeting. The Guidelines related to connecting VC is annexed herewith. PP will be ready before 10 minutes of the slot allowed to them. If any problem faced please contact Mr. Kamal, Moderator, NIC (**Mobile No. 8800225087, email- support-ipb@nic.in**).
3. As there is a time restriction in Video Conferencing, therefore, PP is requested to submit the **requisite documents along with presentation through email to all the Committee Members and Officials of the Ministry by 24.04.2023**. There must be maximum 20 slides for ToR presentation and 30 slides for EC presentation. The Project Proponent is requested to include a separate slide for the matter of court case.
4. The presentation should reflect-
 - i. Point wise ToR Compliance;
 - ii. Contain information regarding total excavation from mines;
 - iii. Method of mining,
 - iv. Stage wise mine development preferably at 5-year interval showing the surface features such as habitations, roads, railway line, transmission line, water body, nallah, forest or other eco-sensitive zones, protection against the surface features
 - v. Surface features through KML file
 - vi. beneficiation, crusher,
 - vii. details of mining lease its validity,
 - viii. transfer,
 - ix. impact of mining activities on air, water, soil, noise, flora & fauna, habitation, socio-economic issues,
 - x. public hearing issues,
 - xi. involvement of forest land,
 - xii. requirement of clearance under Forest Conservation act, 1980,

08								
2008-09								
2009-10								
2010-11								
2011-12								
2012-13								
2013-14								
2014-15								
2015-16								
2016-17								
2017-18								
2018-19								
2019-20								
2020-21								
2021-22								

Note: - The Data filled above should be supported by relevant document

Agency Seal

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ANNEXURE R3/4**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-NON COAL MINING SECTOR)**

**AGENDA FOR 11th MEETING OF THE
EXPERT APPRAISAL COMMITTEE (NON-COAL MINING SECTOR), SCHEDULED TO BE
HELD DURING November 27-28, 2019****Instructions:** Project Proponents are requested to strictly follow the following instructions:

1. The Project Proponents are requested to circulate the documents either in pen drive or hard copy whichever is convenient (**bulky EIA/EMP reports may be sent in pen drive mentioning the agenda numbers**) for the projects included in the Agenda given below to the Chairman and Members of the Committee (as per list given below) immediately. The proponents shall not wait for individual letters to be issued. **The documents shall reach the members at earliest before the meeting.**
2. The Project Proponents are requested to submit the following information at the time of presentation before the EAC and also submit hard copy in spiral binding: -
 - (i) The Project Proponent/Authorized representatives should carry valid proof in support of its legal identity issued from Registrar of Companies.
 - (ii) MOEFCC-R.O. Compliance Report (Applicable for the projects already having EC).
 - (iii) Compliance of order dated 02.8.2017 in CWP No. 114/2014 of Hon'ble Supreme court (Common Cause Vs Union of India &Ors.)
 - (iv) Details of demand if any raised by Department of Mining and Geology
 - (v) Details of payment, if any made to Department of Mines & Geology
 - (vi) Validity of mine lease
 - (vii) Status of mine whether working or not
 - (viii) Details of past production of mine since its inception, duly authenticated by Department of Mines & Geology, State Government.**
 - (ix) Copy of affidavit needs to be submitted by PP in compliance of the Ministry's OM no. 3-50/2017-IA.III (Pt.), dated 30th May 2018.**
 - (x) All the brown field projects applied for EC, ToR, Amendment in ToR & EC should submit details in Annexure-III with all supporting documents.**
 - (xi) KML/Shape Files of the mine lease area at the time of presentation before EAC and to present on the details of mine lease online to show the present status of mine lease and also other leases in 10 km radius.
 - (xii) The Consultants are requested to carry a valid proof in respect of their accreditation status from NABET.
 - (xiii) Details of mining project for EC shall be given in FORM 2 as per format provided at Annexure-2 in compliance of MoEFCC's Office Memorandum No. 22-8/2018-IA. III, dated 20th April 2018.**
 - (xiv) All Certificates' should be addressed to the Ministry on letter head with letter number & dispatch number.
3. Please indicate the item number of the Agenda while circulating the documents.
4. The **KML/Shape** files should be emailed on the below mentioned email addresses at least **10 days** prior to the EAC meeting.
5. The Project Proponents are requested **to carry one set of complete documents** for

Annexure-III

Financial Year	Mining Lease Detail (Initial, Renewal, Transfer) with date and Validity	EC Capacity (Tonne), date, Letter No, amendment etc.	Details of FC	CTE	CTO under Air act (Date, validity, Capacity)	CTO under Water Act (Date, validity, Capacity)	Mining Plan /Mining Scheme		DMG Certified Production (Tonne)	Remarks
							Proposed production (Tonne)	Achieved Production (Tonne)		
1993-94										
1994-95										
1995-96										
1996-97										
1997-98										
1998-99										
1999- 2000										
2000-01										
2001-02										
2002-03										
2003-04										
2004-05										
2005-06										
2006-07										
2007-08										
2008-09										
2009-10										
2010-11										
2011-12										
2012-13										
2013-14										
2014-15										
2015-16										
2016-17										
2017-18										
2018-19										
2019-2020										

Note:- The Data filled above should be supported by relevant document.

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Doc No. MES/EIA/SEC-1/23-03

**ENVIRONMENTAL IMPACT ASSESSMENT
&
ENVIRONMENT MANAGEMENT PLAN**

Block-I Bicholim Mineral Block

**Area : 478.5206 Ha.
Bicholim, Bordem, Lamgao, Mulgao,
Mayem & Sirigao villages
of Bicholim Taluka, North Goa District, Goa**

**PROPONENT
Vedanta Limited
Sesa Ghor, 20 EDC Complex,
Patto, Panjim
Goa- 403001**

JUNE-2023

EIA Consultants

MINERAL ENGINEERING SERVICES
(Accredited by QCI-NABET ORG000756)
25/XXV, Club Road, Ballari-583103, Karnataka,
Tel 08392-267421, Mob: 0919448367421,
Email : mes_msraju@yahoo.co.uk & mesbly25@gmail.com

*Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block*

TOR COMPLIANCE



Doc. No.: MES/EIA/SEC-1/23-03

Sl. No	Specific Terms of Reference	Compliance
1.	Environmental Monitoring	
	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	PP have monitored the air & noise quality near lease boundary, nearest village. Ref Chapter 3 & Annexure- 5 PP is proposing to install continuous air quality monitoring station after obtaining EC
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 and noise pollution	Environmental Management Plan is prepared for air & noise pollution . Refer Chapter -10, Para- 10.3.1 & 10.3.3
3.	Green belt	
	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	The green belt development plan for five year plan period is about 19.1723 Ha area and 47931 saplings proposed . The detailed plan is given vide Chapter-10, para. 10.3.6
4.	Land Environment	
	The Project Proponent needs to submit the plan for ecology restoration	Ref Chapter -10, Para- 10.3.6
	Miscellaneous	
5.	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.	The Mulgao School which is present in the ML is closed
6.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.	The drone survey was conducted and will be submitted during appraisal for EC
7.	During the meeting, the EAC noted that old excavated pits exist within the mine lease	The state govt. auctioned Block-I Bicholim Mineral Block as fresh mine and Vedanta was preferred

	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 <i>Mis. Vedanta Limited</i> or not?	bidder. We have requested to state Govt. for the Clarification, and response is awaited and same shall be provided at the time submission final EIA.
8.	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.	PP will abide by the court judgement
9.	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	The action plan for the protective measures proposed by PP around the vicinity of the mine lease area is given vide chapter – 10, Table.No.10.9
10.	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	OM dated 08.06.2022 shall be complied
	Socio-Economic	
11.	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	After public hearing the PP shall submit the action plan on the concerns of public .
12.	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	The employment-based skill development plan is proposed. Ref Chapter-8 , Para.8.4
	Transportation	
13.	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	The transport route map is given in chapter-3, Para-3.10 , Fig No.4.3

	capacity of the road. The Project Proponent shall ensure that the transportation route shall not pass through any village road.	
	Waste Management	
14.	The Project Proponent needs to submit the action plan for year wise backfilling	The action plan for year wise backfilling for five-year plan period is given vide Chapter-4, Para-4.2.3.1
	Water Environment	
15.	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.	The influence of HFL of asnora river have no impact on mining area . As the mine lease is about 10m above MSL . Ref Chapter-4, Para. 4.7
16.	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.	PP has carried out the assessment study of ground water with drawl as per the guidelines issued by CGWA , and the same is being attached as Appendix- I in EIA /EMP Report
17.	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	The detailed Study on engineering design for the protective measures from the recognized institute is attached as Appendix- III
18.	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.	The scheme for recycle/ reuse of water specified by CGWA is given vide Appnedix-I
19.	The Project Proponent shall explore the	Measures for reduction of specific water

	possibility of reduction of specific water requirement by optimization technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.	requirement are provided in chapter 10 in para 10.5.2.1
20.	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	GREEN FIELD PROJECT
21.	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.	LOI is attached as Annexure. No.1
22.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals	NA
23.	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	The location of the project falls in Topo sheet no 48 E/14 and bounded by latitude of 15° 34' 20.518" to 15° 36' 54.018" N & longitude of 73°54' 4.754" to 73° 57' 09.51" E. The detailed Environmental setting is given Chapter – 2 , Para-2.1, Table. No.2.1
24.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.	PP shall submit the real –time video footage of the mining lease at the time EAC Meeting
25.	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	The high resolution imagery, Topo sheet, geomorphology plates are enclosed

	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).	
26.	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	The Key Plan is enclosed as Plate.no.3
27.	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	The mining block is linked to permanent bench mark established at the site. Ref Plate No. 20
28	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.	NA
29.	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	Proposed green belt for five year plan period is about 19.1723 Ha with 479231 saplings Ref Chapter- 10, Para-10.9.4 Table.no. 10.4

30.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	1. Canteen 2. Rest shelters 3. Drinking water facility on the site 4. Latrines and urinals on the site 5. Dispensary/OHC on site Ref Chapter -2, Para 2.3.6a
31.	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	Enclosed as Plate. Nos. 7a&7b, 18,20
32.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out	The capital cost of the project is Rs. 25000 lakhs. The proposed EMP cost i.e., Capital cost is about 72 lakhs and recurring cost is 448 lakhs. The detailed distribution is given in EIA report Ref Chapter- 10, Para. 10.7, Table.No.10.10
33.	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.	Refer Chapter – 8
34.	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	The Affidavit is enclosed as <i>Annexure-2</i>
	FOREST	
35.	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	As per the auctioned document given by state govt. there is no forest area involved in Block-I Bicholim Mineral Block
36.	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.	NA
	LANDUSE	
37.	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	Enclosed in lease sketch as Plate.No.2

	Government, falling in the mining lease area	
38.	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	Ref Conceptual Plan: Plate No. 6a & 6b
39.	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.	The detailed land use and land breakup is given detail in EIA and EMP Report Ref: Chapter-3, Para- 3.7 And Plate.No.18
40.	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	No external dumps
41.	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	No wildlife sanctuaries in the study area. The detailed biological study was conducted in the study area of 10 kms radius . The detailed wild life conservation plan is prepared and submitted to CWLW
42.	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	The detailed biological study was conducted in the study area of 10 kms radius . There were recorded some Schedule-1 species like Leopard, Indian Peafowl, White-bellied eagle, Crimson rose. The detailed wild life conservation plan is prepared and submitted to CWLW Enclosed as Appendix-IV The Acknowledgement of submission of conservation plan to Chief Wildlife is enclosed as Annexure-8
43.	PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the	NA

	mining lease. In case project requires clearance under Wildlife (Protection) Act, 1972 then copy of application made for the same needs to be submitted							
44.	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 predominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.	The baseline data was conducted during summer season 2023. The report enclosed as Annexure- 5						
45.	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.	The air quality modelling was done using AERMOD software . Ref Chapter-4, Para.4.3						
46.	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	Photographs enclosed in EIA & EMP Report						
	WATER ENVIRONMENT							
47.	The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for	<table border="1"> <thead> <tr> <th>Purpose</th> <th>QTY (KLD)</th> <th>Source</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Purpose	QTY (KLD)	Source			
Purpose	QTY (KLD)	Source						

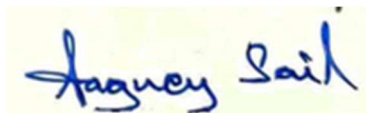
	<p>the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed 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.</p>	<table border="1"> <tr> <td>Dust Suppression</td> <td>600</td> <td rowspan="3">Rain water harvested in mine pit</td> </tr> <tr> <td>Green Belt</td> <td>20</td> </tr> <tr> <td>Vehicle Washing</td> <td>8</td> </tr> <tr> <td>Domestic</td> <td>36</td> <td>Bore Well</td> </tr> <tr> <td>Total</td> <td>664</td> <td></td> </tr> </table>	Dust Suppression	600	Rain water harvested in mine pit	Green Belt	20	Vehicle Washing	8	Domestic	36	Bore Well	Total	664	
Dust Suppression	600	Rain water harvested in mine pit													
Green Belt	20														
Vehicle Washing	8														
Domestic	36	Bore Well													
Total	664														
48.	<p>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</p>	<p>The impact on the water quality and necessary safeguard measures like garland drains, settling ponds are mentioned in chapter- 10, Para-10.5.2</p>													
	<p>HYDROGEOLOGY</p>														
49.	<p>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.</p>	<p>The detailed hydrogeological report is enclosed as Appendix-I</p>													
50.	<p>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</p>	<p>The detailed hydrogeological report is enclosed as Appendix-I</p>													
51.	<p>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</p>	<p>The detailed hydrogeological report is enclosed as Appendix-I The acknowledgment for having submitted the hydrogeological report and application to WRD is enclosed as Annexure-7</p>													

	for the Project should be provided.	
	TRANSPORTATION	
52.	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.	The traffic density study is carried out as per Indian Road Congress Guidelines . Ref Chapter-4, Para-4.10
	LAND ACQUISITION AND R&R	
53.	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	The land details are enclosed vide Annexure-1
54.	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	No R& R is involved
	SOCIO-ECONOMIC ENVIRONMENT	
55.	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	The socio-economic study was conducted Ref. Chapter-3, Para.3.9

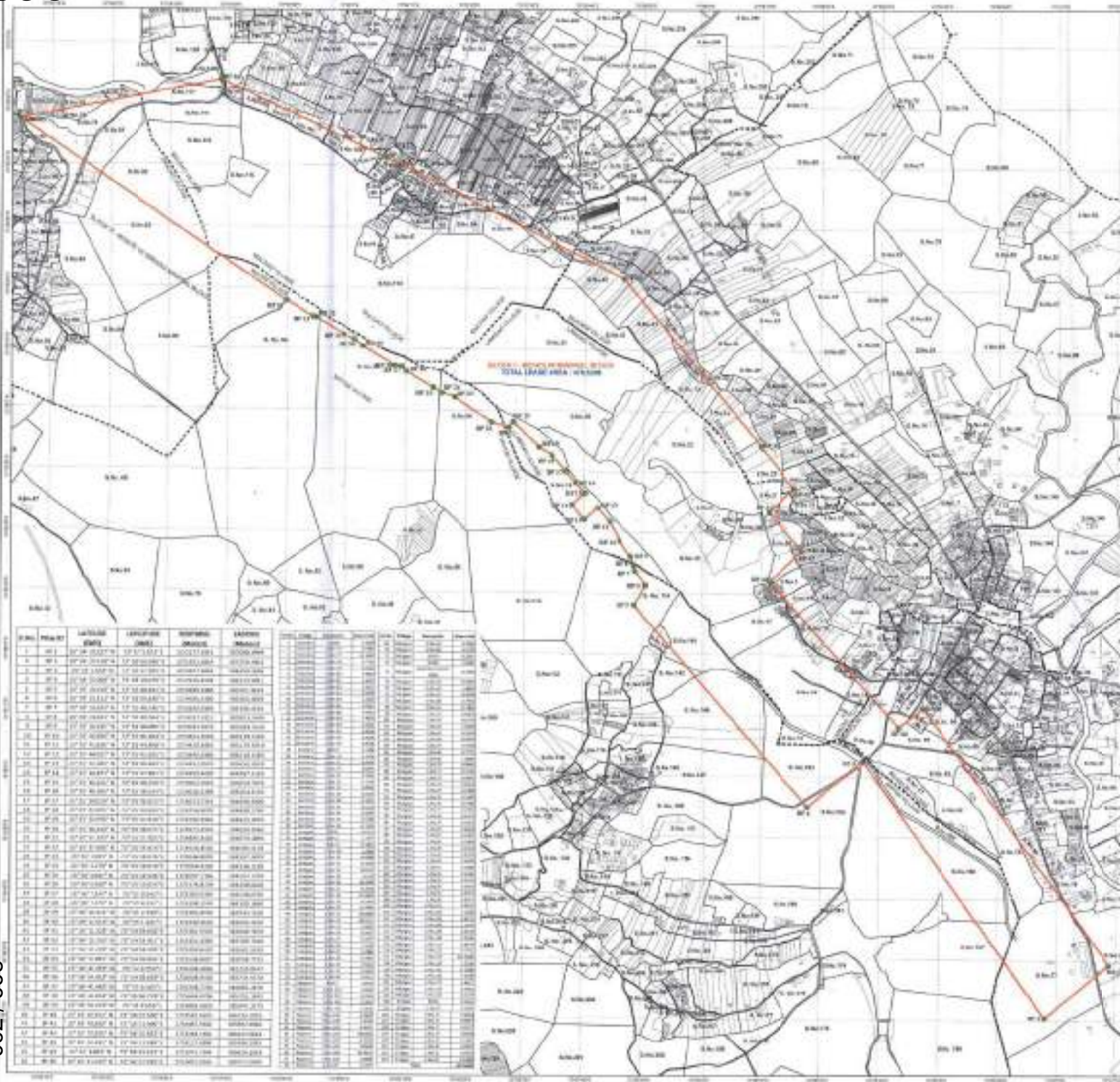
56.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation	Impact study on the local population is done . Detailed study is given in Chapter-4, Para.4.10
57.	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.	Shall be submitted after PH is conducted
	ENVIRONMENTAL MONITORING AND MANAGEMENT	
59.	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.	The hierarchical system or administrative order of the Company to deal with the environmental issues is given in Chapter-10, Para-10.1
	CRITICALLY POLLUTED AREAS, ARAVALI & CRZ	
60.	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.	NA
	Risk Assessment & Disaster Management	
61.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail.	The detailed impact and preventive measures on occupational health is given vide chapter-7, Para.7.4

	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.	
62.	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.	Refer Chapter-7, Para, Para.7.3
63	The general points are also to be followed	Shall be followed
64	All documents to be properly referenced with index and continuous page numbering.	Complied
65	Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated	Complied
66	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.	Enclosed
67	Where the documents provided are in a language other than English, an English translation should be provided	Complied
68	The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted	
69	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	Complied
70.	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	Baseline collected during summer season, 2023
71.	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	Green field Project

	of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.	
72	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	Enclosed



-- TRUE COPY --



SCALE 1:8,000

0 100 200 300 400 500 600 700 800 900 1000 Meters

Geo-referenced & Vectorised Map of Lease Block - BLOCK I - BICHOLIM MINERAL BLOCK

STATE BOUNDARIES
 INTERNATIONAL BOUNDARIES OR WATER BODIES, INCLUDING CANALS
 (BY BICHOLIM BLOCK, NORTH OF DISTRICT GOA)
 RAILWAY LINES (INDICATED BY SPINNING WHEELS)



- Legend**
- LEASE POINTS/LEASE BOUNDARY
 - ▭ LEASE BOUNDARY (ALPHABETIC SURVEY)
 - ▭ PRESENT LEASE BOUNDARY
 - SURVEY LINE BOUNDARY
 - SUB-DIVISION OF THE SURVEYS
 - ==== SURVEY BOUNDARY
 - ==== VILLAGE BOUNDARY

SR. NO.	PARCEL NO.	LATITUDE (NAD83)	LONGITUDE (NAD83)	COORDINATE (NAD83)	COORDINATE (NAD83)
1	101	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
2	102	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
3	103	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
4	104	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
5	105	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
6	106	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
7	107	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
8	108	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
9	109	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
10	110	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
11	111	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
12	112	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
13	113	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
14	114	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
15	115	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
16	116	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
17	117	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
18	118	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
19	119	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
20	120	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
21	121	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
22	122	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
23	123	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
24	124	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
25	125	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
26	126	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
27	127	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
28	128	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
29	129	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
30	130	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
31	131	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
32	132	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
33	133	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
34	134	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
35	135	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
36	136	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
37	137	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
38	138	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
39	139	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
40	140	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
41	141	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
42	142	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
43	143	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
44	144	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
45	145	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
46	146	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
47	147	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
48	148	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
49	149	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000
50	150	15° 34' 30.000000	75° 33' 30.000000	200000.000	200000.000

Plate No - 2

DATE: 10/01/2024 PROJECTION: UTM Zone 48N

DISCLAIMER
 This is to certify that the Mining Lease Boundary shown hereon does not necessarily comply with the Survey of India (Surveying) Act, 1907 and the Survey of India (Surveying) Rules, 1957. The Survey was conducted in accordance with the Survey of India (Surveying) Act, 1907 and the Survey of India (Surveying) Rules, 1957.

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Plan Showing Mining Lease Boundary of BLOCK I - BICHOLIM MINERAL BLOCK 1694 referenced and Vectorised Cadastral Map Situated at Lamgao, Bicholim, Mayem, Mulgao, Bordem & Sirigao Villages of Panjim Taluka of North Goa District, Goa

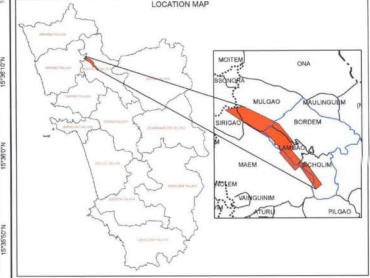
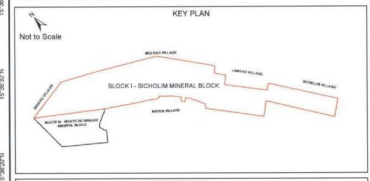


1694



GEO-REFERENCED & VECTORISED MAP OF LEASE NAME: BLOCK I - BICHOLIM MINERAL BLOCK

LESSOR: Vedanta Limited
 LOCATION: LAMGAO, BICHOLIM, MAYEM, MULGAO, BORDEM & SIRIGAO VILLAGES OF BICHOLIM TALUKA, NORTH GOA DISTRICT, GOA
 MINING LEASE AREA AS PER DGPS SURVEY: 478.5206 Ha



- Legend**
- DGPS POINT OF LEASE BOUNDARY
 - ▬ LEASE BOUNDARY AS PER DGPS SURVEY
 - ▬ ADJACENT LEASE BOUNDARY
 - ▬ SURVEY NO BOUNDARY
 - ▬ SUB-DIVISION OF THE SURVEY NO
 - ▬ TALKABOUNDARY
 - ▬ VILLAGE BOUNDARY

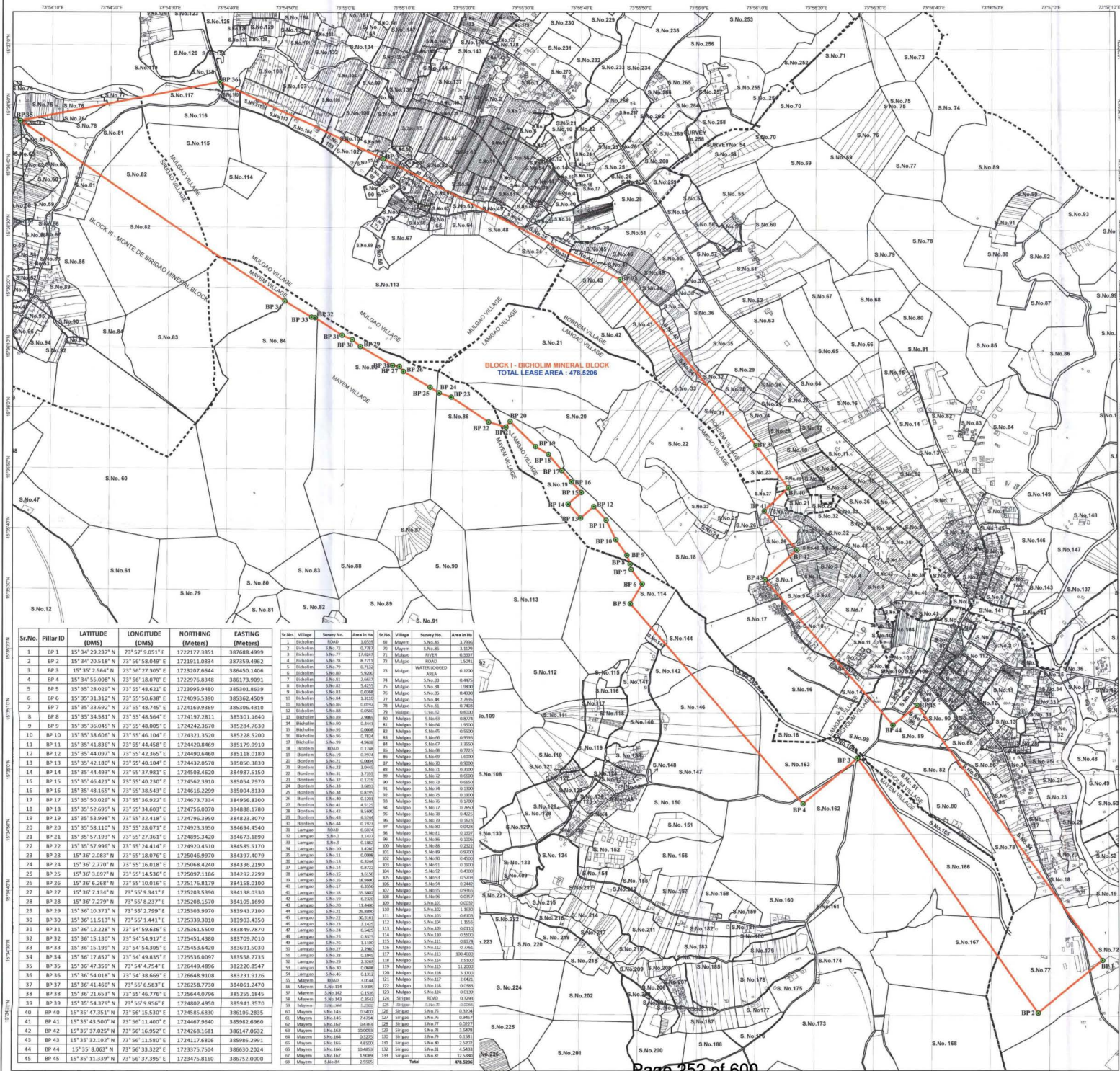
Plate No - 2
 DATUM : WGS 84 PROJECTION : UTM Zone 43N

Prepared by: RSI REMOTE SENSING INSTRUMENTS Pvt. Ltd., INDUSTRIAL ESTATE, KUMARPALLY, HYDRABAD-500018
 Empowered by: Directorate of Mines and Geology, Govt of GOA, PANAJIM, Vide order no. 01/153115-mms/203 dated: 05/04/2013

CERTIFICATE
 This is to certify that the Mining Lease Boundary Pillars have been Surveyed by using DGPS (Differential Global Positioning System). The Survey was conducted earlier to comply with IBM Circular No. 2/2010 dated 06.04.2010.

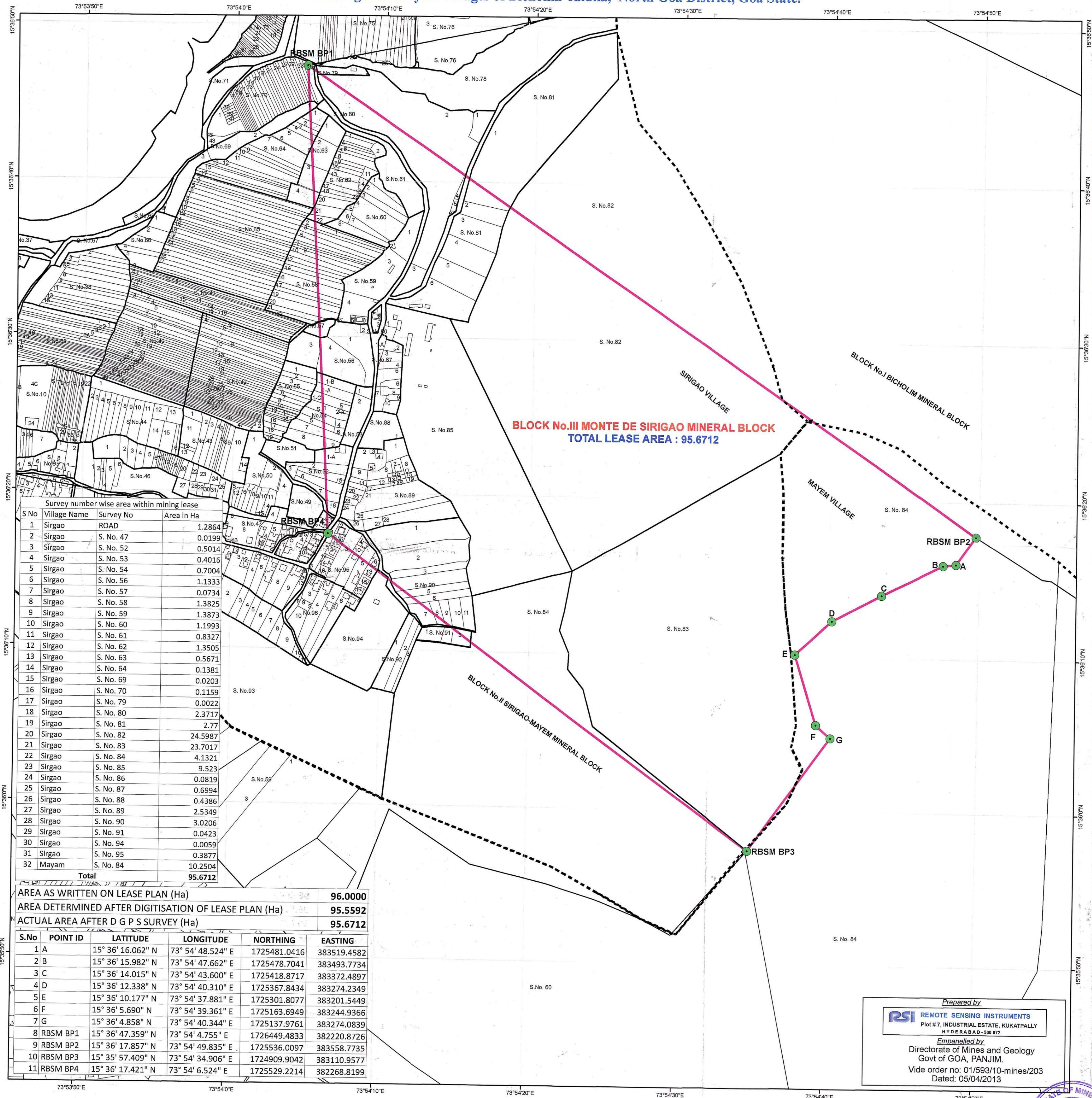
CERTIFICATE
 This is to certify that the Mining Lease Boundary Pillars have been Surveyed by using DGPS (Differential Global Positioning System). The Survey was conducted earlier and this plan is as per requirement of IBM Circular No. 2/2010 dated 06.04.2010.

For Remote Sensing Instruments
 Director of Mines & Geology, Government of Goa, Panaji
 Checked & Certified by: [Signature]
 Director of Mines & Geology, Government of Goa, Panaji



Sr.No.	Pillar ID	LATITUDE (DMS)	LONGITUDE (DMS)	NORTHING (Meters)	EASTING (Meters)	Sr.No.	Village	Survey No.	Area in Ha
1	BP 1	15°34' 29.237"N	73°57' 0.511"E	172217.3851	387628.4999	1	Bordem	S.No.125	0.0000
2	BP 2	15°34' 20.518"N	73°56' 58.049"E	172191.0834	387359.4962	2	Bordem	S.No.126	0.0000
3	BP 3	15°35' 52.564"N	73°56' 27.305"E	172307.6644	386450.1406	3	Bordem	S.No.127	0.0000
4	BP 4	15°34' 52.000"N	73°56' 28.000"E	172295.8388	386213.5091	4	Bordem	S.No.128	0.0000
5	BP 5	15°35' 28.023"N	73°55' 48.621"E	172395.9480	385301.8619	5	Bordem	S.No.129	0.0000
6	BP 6	15°35' 31.312"N	73°55' 50.638"E	172406.5390	385362.4509	6	Bordem	S.No.130	0.0000
7	BP 7	15°35' 31.692"N	73°55' 48.745"E	172416.9369	385366.4310	7	Bordem	S.No.131	0.0000
8	BP 8	15°35' 34.581"N	73°55' 48.564"E	172419.2811	385351.1640	8	Bordem	S.No.132	0.0000
9	BP 9	15°35' 34.043"N	73°55' 48.005"E	172421.3610	385294.3630	9	Bordem	S.No.133	0.0000
10	BP 10	15°35' 38.606"N	73°55' 46.104"E	172432.3520	385228.2000	10	Bordem	S.No.134	0.0000
11	BP 11	15°35' 41.836"N	73°55' 44.458"E	172440.8469	385179.9910	11	Bordem	S.No.135	0.0000
12	BP 12	15°35' 44.097"N	73°55' 42.365"E	172449.6460	385118.1180	12	Bordem	S.No.136	0.0000
13	BP 13	15°35' 42.180"N	73°55' 40.104"E	172442.0570	385050.3830	13	Bordem	S.No.137	0.0000
14	BP 14	15°35' 41.493"N	73°55' 37.683"E	172440.4620	384987.5150	14	Bordem	S.No.138	0.0000
15	BP 15	15°35' 46.421"N	73°55' 40.203"E	172456.3910	385054.7970	15	Bordem	S.No.139	0.0000
16	BP 16	15°35' 48.165"N	73°55' 38.543"E	1724616.2299	385004.8130	16	Bordem	S.No.140	0.0000
17	BP 17	15°35' 50.029"N	73°55' 36.922"E	172467.7334	384958.8900	17	Bordem	S.No.141	0.0000
18	BP 18	15°35' 52.695"N	73°55' 34.603"E	172475.0070	384888.1780	18	Bordem	S.No.142	0.0000
19	BP 19	15°35' 54.960"N	73°55' 32.181"E	172476.3950	384823.3070	19	Bordem	S.No.143	0.0000
20	BP 20	15°35' 58.110"N	73°55' 28.971"E	1724923.3950	384694.4540	20	Bordem	S.No.144	0.0000
21	BP 21	15°35' 57.191"N	73°55' 27.361"E	1724895.3420	384673.1890	21	Bordem	S.No.145	0.0000
22	BP 22	15°35' 57.996"N	73°55' 24.414"E	1724920.4510	384585.1510	22	Bordem	S.No.146	0.0000
23	BP 23	15°36' 0.087"N	73°55' 18.076"E	1725046.9970	384397.4070	23	Bordem	S.No.147	0.0000
24	BP 24	15°36' 2.770"N	73°55' 16.018"E	1725081.4950	384346.1190	24	Bordem	S.No.148	0.0000
25	BP 25	15°36' 5.697"N	73°55' 14.536"E	1725097.1186	384292.2299	25	Bordem	S.No.149	0.0000
26	BP 26	15°36' 6.268"N	73°55' 10.016"E	1725116.8179	384158.0100	26	Bordem	S.No.150	0.0000
27	BP 27	15°36' 7.134"N	73°55' 9.341"E	1725203.5390	384138.0330	27	Bordem	S.No.151	0.0000
28	BP 28	15°36' 7.279"N	73°55' 8.237"E	1725208.1570	384105.1690	28	Bordem	S.No.152	0.0000
29	BP 29	15°36' 7.770"N	73°55' 7.299"E	1725218.9920	384073.1100	29	Bordem	S.No.153	0.0000
30	BP 30	15°36' 11.513"N	73°55' 1.441"E	1725393.3010	383903.4550	30	Bordem	S.No.154	0.0000
31	BP 31	15°36' 12.228"N	73°54' 59.663"E	1725361.5500	383849.7870	31	Bordem	S.No.155	0.0000
32	BP 32	15°36' 15.130"N	73°54' 54.917"E	1725451.4380	383709.7010	32	Bordem	S.No.156	0.0000
33	BP 33	15°36' 15.199"N	73°54' 54.305"E	1725453.6420	383691.5030	33	Bordem	S.No.157	0.0000
34	BP 34	15°36' 15.265"N	73°54' 49.835"E	1725455.0097	383559.7375	34	Bordem	S.No.158	0.0000
35	BP 35	15°36' 47.359"N	73°54' 4.754"E	1725649.4896	382220.8547	35	Bordem	S.No.159	0.0000
36	BP 36	15°36' 54.018"N	73°54' 38.669"E	1726648.9108	38231.9126	36	Bordem	S.No.160	0.0000
37	BP 37	15°36' 41.460"N	73°55' 6.583"E	1726258.7730	384061.2470	37	Bordem	S.No.161	0.0000
38	BP 38	15°36' 21.653"N	73°55' 46.770"E	1725664.0796	385255.1845	38	Bordem	S.No.162	0.0000
39	BP 39	15°36' 15.437"N	73°54' 9.956"E	1724802.4850	385441.3570	39	Bordem	S.No.163	0.0000
40	BP 40	15°36' 47.359"N	73°56' 15.530"E	1724585.6880	386105.2815	40	Bordem	S.No.164	0.0000
41	BP 41	15°35' 43.500"N	73°56' 11.400"E	1724467.9640	385962.6960	41	Bordem	S.No.165	0.0000
42	BP 42	15°35' 37.025"N	73°56' 16.952"E	1724264.1681	386147.0032	42	Bordem	S.No.166	0.0000
43	BP 43	15°35' 32.107"N	73°56' 11.540"E	1724117.6806	385966.2991	43	Bordem	S.No.167	0.0000
44	BP 44	15°35' 33.003"N	73°56' 33.222"E	1724375.7548	386026.2024	44	Bordem	S.No.168	0.0000
45	BP 45	15°35' 31.339"N	73°56' 37.395"E	1724375.8160	386071.0000	45	Bordem	S.No.169	0.0000

Geo Referenced Cadastral Map of BLOCK No.III MONTE DE SIRIGAO MINERAL BLOCK, situated in Sirigao & Mayem Villages of Bicholim Taluka, North Goa District, Goa State.



BLOCK No.III MONTE DE SIRIGAO MINERAL BLOCK
TOTAL LEASE AREA : 95.6712

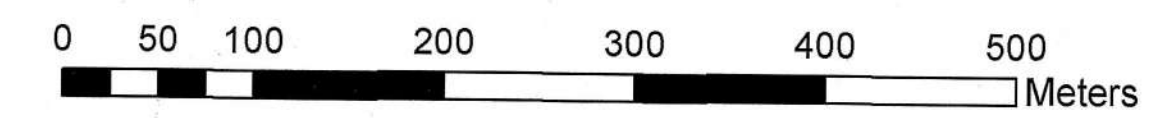
S.No	Village Name	Survey No	Area in Ha
1	Sirigao	ROAD	1.2864
2	Sirigao	S.No. 47	0.0199
3	Sirigao	S.No. 52	0.5014
4	Sirigao	S.No. 53	0.4016
5	Sirigao	S.No. 54	0.7004
6	Sirigao	S.No. 56	1.1333
7	Sirigao	S.No. 57	0.0734
8	Sirigao	S.No. 58	1.3825
9	Sirigao	S.No. 59	1.3873
10	Sirigao	S.No. 60	1.1993
11	Sirigao	S.No. 61	0.8327
12	Sirigao	S.No. 62	1.3505
13	Sirigao	S.No. 63	0.5671
14	Sirigao	S.No. 64	0.1381
15	Sirigao	S.No. 69	0.0203
16	Sirigao	S.No. 70	0.1159
17	Sirigao	S.No. 79	0.0022
18	Sirigao	S.No. 80	2.3717
19	Sirigao	S.No. 81	2.77
20	Sirigao	S.No. 82	24.5987
21	Sirigao	S.No. 83	23.7017
22	Sirigao	S.No. 84	4.1321
23	Sirigao	S.No. 85	9.523
24	Sirigao	S.No. 86	0.0819
25	Sirigao	S.No. 87	0.6994
26	Sirigao	S.No. 88	0.4386
27	Sirigao	S.No. 89	2.5349
28	Sirigao	S.No. 90	3.0206
29	Sirigao	S.No. 91	0.0423
30	Sirigao	S.No. 94	0.0059
31	Sirigao	S.No. 95	0.3877
32	Mayem	S.No. 84	10.2504
Total			95.6712

AREA AS WRITTEN ON LEASE PLAN (Ha) **96.0000**
 AREA DETERMINED AFTER DIGITISATION OF LEASE PLAN (Ha) **95.5592**
 ACTUAL AREA AFTER D G P S SURVEY (Ha) **95.6712**

S.No	POINT ID	LATITUDE	LONGITUDE	NORTHING	EASTING
1	A	15° 36' 16.062" N	73° 54' 48.524" E	1725481.0416	383519.4582
2	B	15° 36' 15.982" N	73° 54' 47.662" E	1725478.7041	383493.7734
3	C	15° 36' 14.015" N	73° 54' 43.600" E	1725418.8717	383372.4897
4	D	15° 36' 12.338" N	73° 54' 40.310" E	1725367.8434	383274.2349
5	E	15° 36' 10.177" N	73° 54' 37.881" E	1725301.8077	383201.5449
6	F	15° 36' 5.690" N	73° 54' 39.361" E	1725163.6949	383244.9366
7	G	15° 36' 4.858" N	73° 54' 40.344" E	1725137.9761	383274.0839
8	RBSM BP1	15° 36' 47.359" N	73° 54' 4.755" E	1726449.4833	382220.8726
9	RBSM BP2	15° 36' 17.857" N	73° 54' 49.835" E	1725536.0097	383558.7735
10	RBSM BP3	15° 35' 57.409" N	73° 54' 34.906" E	1724909.9042	383110.9577
11	RBSM BP4	15° 36' 17.421" N	73° 54' 6.524" E	1725529.2214	382268.8199



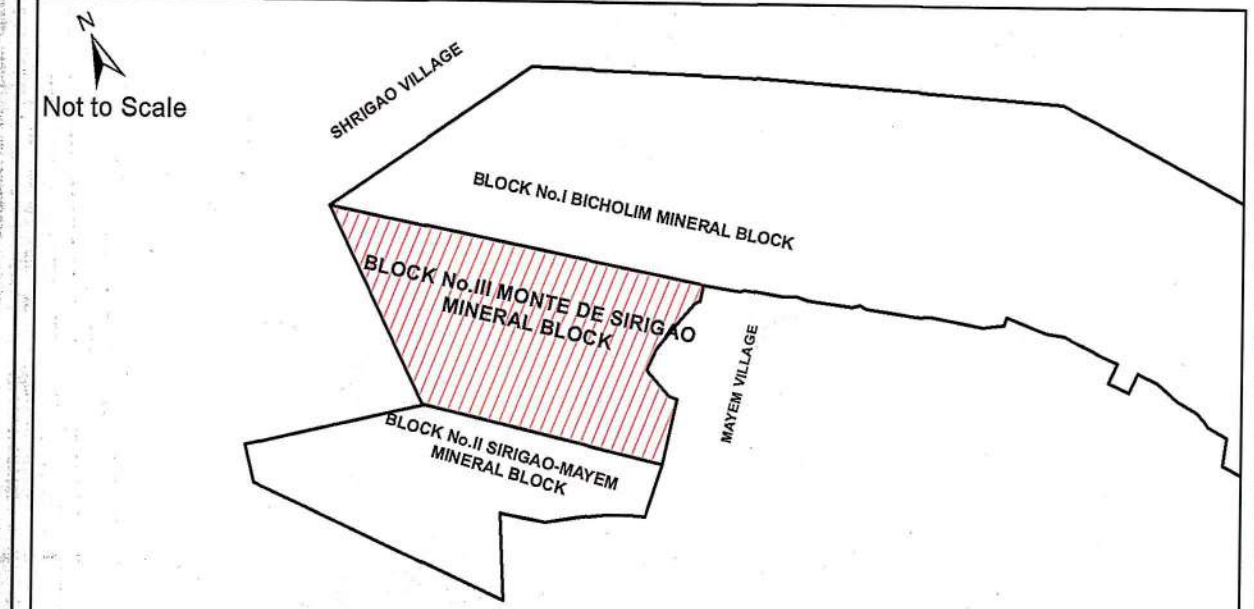
SCALE 1:3,960



Legend

- DGPS POINT OF LEASE BOUNDARY
- LEASE BOUNDARY AS PER DGPS SURVEY
- ADJACENT LEASE BOUNDARY
- SURVEY No BOUNDARY
- SUB-DIVISION OF THE SURVEY No
- TALUKABOUNDARY
- VILLAGE BOUNDARY

KEY PLAN



DATUM : WGS 84

PROJECTION : UTM Zone 43N

LOCATION MAP

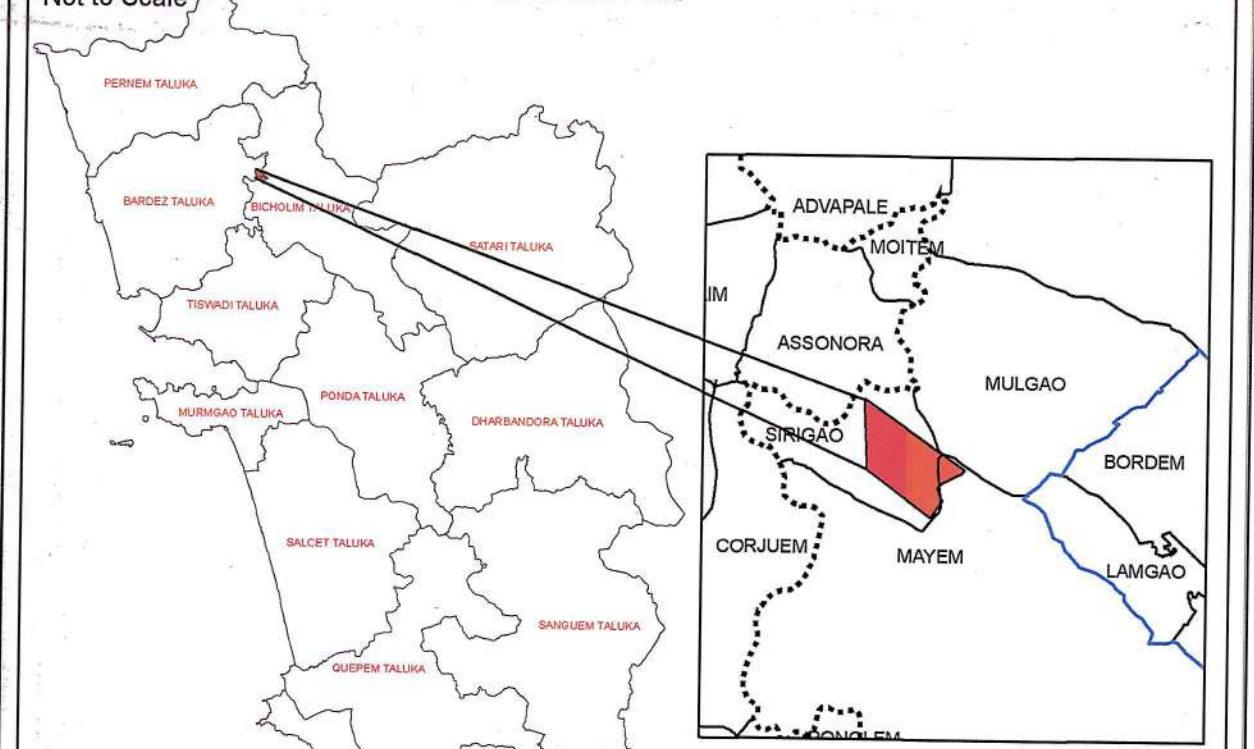


Plate no. 2

CERTIFICATE
 This is to certify that the lease boundary pillars of Block No.III Monte De Sirigao mineral block have been surveyed using DGPS (Differential Global Positioning System) and is based upon the Total Station survey conducted earlier.

Shri Sujay C Parrikar
 Shri Sujay C Parrikar
 (Authorised Signatory)

CERTIFICATE
 This is to certify that the lease boundary pillars of Block No.III Monte De Sirigao mineral block, shown by Mr.KAMLESH JHA (Mines Manager) has been surveyed by our team led by Shri. Ch.Sivalah using DGPS (Differential Global Positioning System) instruments. The lease map and pillar locations have been verified, survey conducted and plans prepared as per requirement of IBM Circular No. 2/2010 dated 6-4-2010.

Shri. B.V. Ramana Kumar
 Shri. B.V. Ramana Kumar
 (Chief Executive Officer)

Prepared by
RSI REMOTE SENSING INSTRUMENTS
 Plot # 7, INDUSTRIAL ESTATE, KUKATPALLY
 HYDERABAD-500 072

Empanelled by
 Directorate of Mines and Geology
 Govt of GOA, PANJIM.
 Vide order no. 01/593/10-mines/203
 Dated: 05/04/2013

Directorate of Mines and Geology - Panaji -Goa

Certified by
[Signature]
 Assistant Geologist
 Directorate of Mines & Geology
 Government of Goa
 Panaji-Goa

[Signature]
 Assistant Geologist
 Directorate of Mines & Geology
 Government of Goa
 Panaji-Goa

[Signature]
 Director of Mines & Geology
 Directorate of Mines & Geology
 Government of Goa
 Panaji-Goa

Agency Seal

-- TRUE COPY --



Application for ToR (Category A, B1, and B2 Violation)/EC (Category B2) - Form 1

Project Details

1. Introduction of Project or Activity

1.1. Need for the project or activity and its importance to the country/region	Project will cater to domestic as well as export of iron ore thus generating revenue to the country.
1.2. Demand - Supply Gap and Domestic and export markets, if any	The extracted 3.0 MTPA of Iron ore will be used to meet domestic requirement of Iron Ore for local industries as well exports.

2. Social Infrastructure

2.1. Readily available	Available and includes healthcare (medical facilities and ancillary infrastructure), education (schools), roads and housing, drinking water supply, irrigation facilities
2.2. Proposed to be developed	Company through its various CSR interventions will support social infrastructure especially in the field of education, agriculture, community halls, renewable energy etc

3. Connectivity to the project or activity

3.1. Nearest railway station and its distance (in Km)	Tivim Raiway Station	10.5
3.2. Nearest Airport and its distance (in Km)	MOPA	27.3
3.3. Nearest Town/City/District head quarter and its distance (in Km)	Bicholim Town	0.5

4. Soil classification	The soil texture varies from Clay loam to silty clay in the areas. The predominant soils in the district are lateritic soils.	
5. Distance from the HFL of the river in m, if any	0	

6. Benefits of the project

6.1. Social benefits of project or activity	1. Social upliftment of the area through CSR activities 2. Employment generation in direct and indirect way. 3. harvested rain water will be supplied for the irrigation purpose will help the farmers to increase their agriculture and horticulture yield. 4. The Lessee will implement the various programs in Health, Education and skill development for the villagers and strengthen the existing facilities in the area.
6.2. Financial benefits of project or activity	1. The capital cost of the project is Rs 250 cores. Net profit after taxation to the PP will be around 35.0 cr per annum to the project proponent 2.,Government will receive funds in the form of Goa Permanent Fund, Mining Royalty, National Mineral Exploration Trust, District Mineral Fund & Premium @ 63.55 %.

7. Project/ Activity Construction Status

7.1. Likely date of start of construction activity (start of mining operations in case of mining proposals)	01/09/2023
7.2. Likely date of completion of construction activity (end of mining operations in case of mining proposals)	31/08/2073

Construction Details

8. Use of resources for construction or operation of the project

8.1. Whether requirement of water involved in the project? Yes

Details of Water requirement during Construction stage

Source	Quantity in KLD Present	Quantity in KLD with Expansion	Method of water withdrawal	Distance from Source in mtr	Mode of Transport	Details of Permission
it is mining project, there is no construction stage	0	0	NA	0	Other	NA

Details of Water requirement during Operational stage

Source	Quantity in KLD Present	Quantity in KLD with Expansion	Method of water withdrawal	Distance from Source in mtr	Mode of Transport	Details of Permission
Other	628	0	Others	0	Tankers	will be applied
Ground Water	36	0	Tube well	0	Tankers	permission is available in the name subsidiary, we will get the same and trasfered to M/s Vedanta Ltd.

8.2. Other information, if any Rain water harvested in the mine pit

8.3. Whether requirement of Minerals and/or fuels involved in the project? Yes

Details thereof

Name of Minerals / Fuel	Quantity per annum in MT	Source	Mode of transport	Distance from source in Km	Details of linkage / supply agreement
HSD	9425.5	Authorized oil company	Road	55	

8.4. Other information, if any Banaulim Pump Station, Goa

8.5. Construction material No

8.6. Timber No

8.7. Electric Power: Yes

8.7.1. Total Electricity requirement (MW): 5.8

8.7.2. Main Source: Grid and clean energy generated at company's WHRPP is given to the State grid and will be utilized

8.7.3. Renewable energy proposed to install (KW): 20

8.7.4. Percentage contribution of renewable energy: 1.6

8.7.5. Standby arrangements (details of DG Sets): 1000 KVA X 1 Nos ,500KVA x 1 Nos & 200 KVA x 3 Nos

8.7.6. Stack height in m (DG set): 12

8.7.7. Energy conservation measures:

clean energy generated at company's waste heat recovery power plant is given to the State grid and will be utilized at

8.7.7. Energy conservation measures:	Bicholim mine Under open access ; use of sensors to switch of lights when not in use.use of LED lights for offices
8.8. Whether any other natural resources / other raw materials required?:	No
8.9. Whether any use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies) required?	No
8.10. Whether any resource efficiency / optimization / recycling and reuse envisaged in the project?	Yes
8.10.1. Details	Rain water harvested in pit will be used for dust suppression and green belt. The water will also recharge the ground water reachage purpose

Physical Changes

9. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality:

9.1. Whether any permanent or temporary change in land use, land cover or topography due to project activity? Yes

Current Land Use	Area in Ha	Remarks
9.1.1. Forest Land	0	N/A
9.1.2. Agriculture land	0	N/A
9.1.3. Grazing Land	0	N/A
9.1.4. Barren Land	0	N/A
9.1.5. Waste Land	0	N/A
9.1.6. Surface water bodies	0	N/A
9.1.7. Marshy land	0	N/A
9.1.8. Mangroves	0	N/A
9.1.9. Settlements	32.4047	N/A
9.1.10. Roads / Other infrastructure	0	N/A
9.1.11. Plantation / Green belt	0	N/A
9.1.12. Industrial use	0	N/A

9.1.13. Other land use

Please Specify	Area in Ha	Remarks
Degraded by Pits & Excavation	306.8497	
Degraded by Dumps & Material Staking	41.6116	
Covered under Mine Infrastructure (plants, shades,	6.4707	
Land under Public Infrastructure / Utilities (wate	1.021	
Barren / Waste land with small bushes & shrubs	90.1629	
9.1.14. Total	478.5206	

9.1.15. Proposed/Post-project land use

Please Specify	Area in Ha	Remarks
Degraded by Pits & Excavation	355.5850	

Degraded by Pits & Excavation	355.5659	
Settlements	32.4047	
Covered under Mine Infrastructure (plants, shades,	6.4707	
Barren / Waste land with small bushes & shrubs	76.3437	
Degraded by Dumps & Material Staking	6.7146	
Land under Public Infrastructure / Utilities (wate	1.021	
9.1.16. Green belt	0	N/A
9.1.17. Total	478.5206	
9.2. Whether any clearance of existing vegetation due to project activity?	Yes	
9.2.1. No. of Trees	500	
9.2.2. Area covered with plantation/ vegetation / greenbelt proposed to be cleared in Ha	80.4119	
9.2.3. No. of trees proposed for transplantation	0	
9.2.4. Other information, if any	The areas proposed for clearing vegetation are the ones where acacia plantation was done or has come naturally. The same was done as temporary measure to prevent soil	
9.3. Whether any loss of native species or genetic diversity?	No	
9.4. Whether any demolition works involved in project activity?	No	
9.5. Whether any linear structures proposed for diversion or demolition due to project activity? (e.g. roads, transmission lines, rail line, pipeline, conveyor, etc.)	No	
9.6. Whether any closure or diversion of existing transport routes or infrastructure due to project leading to changes in traffic movements?	No	
9.7. Whether any closure or diversion of water bodies present in project area or realignment of water courses passing through project area?	No	
9.8. Whether any dismantling or decommissioning or restoration works or reclamation works (Long-term/ short-term)?	No	
9.9. Whether any construction works for temporary use for project activity?	No	
9.10. Whether any cut and fill excavations proposed for the project activity?	No	
9.11. Whether any underground works including tunnelling?	No	
9.12. Whether any dredging involved in project?	No	

9.12. Whether any dredging involved in project?	No
9.13. Whether any offshore structures involved in project?	No
9.14. Whether any new road, rail, sea, airports, helipad, etc. during construction or operation?	No
9.15. Whether any construction of new linear structures? (e.g. transmission lines, pipelines, etc.)	No
9.16. Whether any Facilities for storage of goods or raw materials?	No
9.17. Whether any Facilities for long term/ permanent housing of operational workers/ staff?	No
9.18. Whether any Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No
9.19. Whether any Stream crossings, temporary and permanent?	No
9.20. Whether any Influx of people to an area in either temporarily or permanently?	No
9.21. Whether any other information would like to submit?	No

Pollution Details

10. Release of pollutants to Air and Mitigation measures

10.1. Whether any probable air pollutants generated? Yes

Air Pollution Source	Probable Pollutants	Mitigation Measures
Transport of raw material/products	PM, SO ₂ , NO ₂	Major portion of road is dedicated company owned road, water sprinkling for Dust suppression, washin
Transport of raw material/products	PM, SO ₂ , NO ₂	Dust suppression, Green belt development, maintenance of machinery, env. monitoring.
Crushing	PM, SO ₂ , NO ₂	Dust suppression, Green belt development, maintenance of machinery, env. monitoring.
DG sets	PM, SO ₂ , NO _x , CO	DG will be used as stand by for power. Port hole will be provided for stack monitoring
Excavation	PM, SO ₂ , NO _x	Dust suppression, Green belt development, maintenance of machinery, env. monitoring.
Dumping	PM, SO ₂ , NO ₂	Dust suppression, Green belt development, maintenance of machinery, env. monitoring.
Screening	PM, SO ₂ , NO ₂	Dust suppression, Green belt development, maintenance of machinery, env. monitoring.

10.2. Other information, if any

Major portion of road is dedicated company owned road, water sprinkling for Dust suppression, washing of road, use of road sweeping machine, Green belt development,

 maintenance of machinery, env. monitoring.
10.3. Generation of Noise & Vibration and mitigation measures	
10.3.1. Whether any probable generation of Noise and vibration from the proposed project?	Yes
10.3.1.1. Sources of Noise	Noise generated due to operation of heavy earth moving machinery, hauling equipment's and crushing and screening plant.
10.3.1.2. Sources of Vibration	Operations of heavy earth moving machinery
10.3.1.3. Details of blasting, if any	No Blasting is involved
10.3.1.4. Other information, if any	N/A
10.3.1.5. Whether any mitigation measures proposed for Noise & Vibration?	Yes
10.3.1.5.1. Mitigation measures proposed for control of Noise	Green belt, Periodical lubrication of the heavy vehicles will help to keep the noise & vibration level at minimum, proper grading of mine roads. Overall, the impact of noise is insignificant
10.3.1.5.2. Mitigation measures proposed for control of vibration	Drilling and blasting activities will be replaced by use of eco-friendly heavy duty ripper dozers and hydraulic excavators. will be used.
10.3.1.5.3. Other information, if any	Green belt, Periodical lubrication of the heavy vehicles will help to keep the noise & vibration level at minimum, proper grading of mine roads. Overall, the impact of generated noise on the environment is likely to be insignificant, reversible and localized in nature.
10.3.2. Whether any probable generation of Light and Heat?	No
10.4. Discharge of pollutants to water and mitigation measures	
10.4.1. Whether any probable water pollutants generated?	Yes
10.4.1.1. Organic Pollutants	Not applicable
10.4.1.2. Inorganic pollutants	Not applicable
10.4.1.3. Micro-organism	Not applicable
10.4.1.4. Sediments	Suspended Solids
10.4.1.5. Heavy metals	Not applicable
10.4.1.6. Others (Specify)	During rainy season, water from the catchment areas will be diverted to the open mine pit through trenches and garland drains and allowed to settle. The same water will be further utilized for various gainful purposes including for irrigation and groundwater recharge purposes.
10.5. Probable sources of water pollutant	No
Details of reuse / recycle of wastewater	
Details	Qty / Capacity
10.6. Quantity of waste water generation per day (KLD)	0
10.7. Quantity of treated water proposed to use per day (KLD)	0
10.8. Quantity of treated water proposed to discharge outside	0

the premises (KLD)	0
10.9. Purpose for which treated water is proposed to use	No waste water generation
10.10. Whether it is proposed to opt/avail common off-site Sewage Treatment Plant (CSTP)/Effluent Treatment Plant (CETP) facility?	No
10.11. Whether it is proposed to setup on-site Sewage Treatment Plant (STP)/Effluent Treatment Plant (ETP) facility?	No
10.12. Whether the adequacy of the Sewage Treatment Plant (STP) or Effluent Treatment Plant certified by an independent expert?	No
10.12.1. Reasons thereof	No STP proposed as the generation of domestic effluent happen at several places like mine office, mine work shop, site office etc. These locations are spread across the mine and not at a single location. No ETP is proposed as there is no generation of any effluent.
10.13. Whether any other mitigation measures proposed?	No
10.14. Whether Dual Plumbing System proposed to be implemented?	No
10.14.1. Reasons thereof	Not Applicable
10.15. Whether any discharge of treated effluent involved?	No

Water Requirements

11. Ground water intersection and water conservation measures:	
11.1. Whether ground water table intersection involved in the project activities?	Yes
11.1.1. Details of the Ground Water table	2 top Pit : 8 m RL, 1 top pit : -6 m RL, 3/4 bottom : 9m RL & 5 Top : 14 m RL, 5 Top common boundary : 67 m RL
11.1.2. Measures to recharge ground water	rain water is channelized into mine pits and settling ponds which helps to recharge ground water. Rain water harvested will be used for dust suppression at mines, for green belt.
11.1.3. Whether approval obtained for ground water intersection from the competent authority	No
11.2. Area category from Groundwater availability perspective?	Safe
11.3. Whether Rainwater harvesting proposed	Yes
11.3.1. Capacity of facilities provided	10128221
11.3.2. Description of facilities provided	Rain water will be harvested in mine pits.
11.3.3. Description	Rain water will be harvested in mine pits. 10128221 Cum water will be harvested
11.3.4. Total Quantity of water requirements met from water harvesting in KLD	628
11.3.5. Storage capacity of rain water harvested in cubic	10128221

..... meters	10128221
11.4. Whether any other water conservation measures proposed?	Yes
11.4.1. Details thereof	Mine Pit is used for rain water harvesting during monsoon. The same water is further used for dust suppression, ground water recharge and green belt development.
11.5. Whether the ZLD is proposed?	No

8. Greenbelt

8.1. Area proposed for green belt (in Ha)	105.8894
8.2. Width of green belt (in m) along the boundary of the project or activity	7.5
8.3. Percentage of the total area covered under green belt	22.12
8.4. Details of the species proposed for plantation	plantation will be carried out under the guidance of forest department. Plantation would be mix of various Native forestry species, horticulture species grasses and shrubs
8.5. No. of tree saplings to be planted	265000
8.6. Funds allocated for plantation in Lakhs.	159

Waste Generation

9. Production of wastes during construction or operation or decommissioning				
9.1. Whether any generation of Solid waste (domestic wastes)?	Yes			
Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Biodegradable canteen waste	Canteen	23	Converted into manure & used for afforestation	Within ML Area
9.2. Whether any generation of plastic waste?	No			
9.3. Whether any generation of e-waste?	Yes			
Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Electrical and Electronics	Office, Workshop, etc	0.5	To registered recyclers	Road
9.4. Whether any generation of batteries waste?	Yes			
Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Batteries	HEMM/Vehicle maintenance	6	Buyback/authorized recycler	Road
9.5. Whether any generation of Bio-medical waste?	Yes			
Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Yellow, Red and White Cat. biomedical waste	Dispensary	0.05	As per SPCB Authorization	Yellow, Red, White and blue Cat. biomedical waste

9.6. Whether any generation of hazardous wastes (as per Hazardous Waste Management Rules)?

Yes

Name of the waste	Source	Qty (TPA)	Mode of disposal	Mode of Transport
Waste/spent oil	Maintenance of plants and machineries	60	Disposed to recycler registered with SPCB and having valid authorization of SPCB	Road
Waste residue contaminated with oil	Maintenance of plants and machineries	9	To recycler registered with SPCB and having valid authorization of SPCB	Road
Filters Contaminated with oil	Maintenance of plants and machineries	5	To recycler registered with SPCB and having valid authorization of SPCB	Road
Empty paint tins	Painting	0.1	To recycler registered with SPCB and having valid authorization of SPCB	Road

9.7. Whether any generation of construction or demolition wastes?

No

9.8. Whether any generation of other wastes?

No

9.9. Whether any generation of surplus products?

No

9.10. Whether measures for waste minimization proposed?

Yes

9.10.1. Details thereof

The 3 R's (Reduce Reuse and Recycle) will be implemented.

Risk Assessment

10. Whether any risks associated with project activities which could affect human health or the environment, -

10.1. From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances?

No

10.2. From any other causes?

No

10.3. Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?

No

10.4. Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)

No

10.5. Could project adversely affect the wellbeing of people in project area e.g. by changing living conditions?

No

10.6. Vulnerable groups of people who could be adversely affected by the project e.g. hospital patients, children, the elderly etc.

No

10.7. Risk Management Plan

Yes

10.7.1. Details thereof

Risk management plan will be prepared during EIA.

10.8. Whether any likely impacts of the proposed activity on the existing facilities adjacent to the proposed site due to generation of dust, smoke, odorous fumes or other hazardous

Yes

generation of dust, smoke, odorous fumes or other hazardous gases?

Existing adjacent facilities/Resources	Impact
10.8.1. Agriculture	rain water harvested in mine pits will be supplied to adjoining area for farming, agriculture development programmes will be conducted in surrounding areas as part of CSR activities.
10.8.2. Natural Resources	Rain water harvesting measures will increase the ground water table in the areas. Also the plantation of local fruit bearing trees will help the land owners in near future.
10.8.3. Community facility	community development programs including Health , education, skill development and other need based activities which will definitely strengthen the existing facilities available in the village and its surroundings.
10.8.4. Other	--

11. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

11.1. Whether lead to development of supportive facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: Supportive infrastructure (roads, power supply, waste or waste water treatment, etc.); housing development; industries in supply chain and downstream; any other? Yes

11.1.1. Details thereof

The opening of the Mine in the area will contribute towards the upliftment of the socioeconomics of the area. • The payment in the form of DMF, Royalty, National Mineral Iron Ore Fund will contribute to the State and Nation. DMF is meant to be used for people and the area affected due to mining in the region and National Mineral Iron ore fund which is meant to support exploration of Minerals in the country • Apart from this, Company will also undertake CSR programs in surrounding village

11.2. Whether lead to after-use of the site, which could have an impact on the environment? (e.g. mine void, dump sites, etc.) Yes

11.2.1. Details thereof

While implementation of Final Mine Closure Plan under Rule 24 of MCDR 2017, the area will be restored by way of carrying out plantation with local forest and fruit bearing trees and building up of a good water reservoir for the purpose and benefit of ground water recharge and water requirement in the surrounding villages.

11.3. Whether set a precedent for later developments? Yes

11.3.1. Details thereof

A better after use scenario, which is likely to increase aesthetic beauty of the area by converting the excavated region into water Regime, used to construct water harvesting structures & greenery would set a precedence for subsequent entrepreneurs who venture such projects.

11.4. Have cumulative effects due to proximity to other existing or planned projects with similar effects? No

11.5. Whether lead to growth of alien species, if any? No

11.6. Is there any threat of the project to the biodiversity (including displacement of fauna-both terrestrial and aquatic and avi-fauna or creation of barriers for their movement)? No

11.7. Will the proposed project in any way result in the obstruction of a view, scenic amenity or landscapes? No

11.8. Is there any impact on anthropological or archaeological sites or any important site feature in the vicinity of the proposed site have been considered? No

11.9. Will the proposed project result in any changes to the demographic structure of local population? No

11.10. Will the project cause adverse effect on local communities, disturbance to sacred sites or other cultural values? No

12. Mining Proposals

12.1. Details of Letter of Intent (LoI) / Vesting order / Mining Lease

12.1.1. Date of issue of LoI/Vesting order/Minning Lease	13/01/2023
12.1.2. Validity of the LoI/Vesting order	12/01/2026
12.1.3. Lease Period	50/00
12.1.4. Date of expiry of lease	12/01/2073
12.1.5. Lease area (in Ha) as per LoI/Vesting order/Mining Lease	478.5206
12.1.6. Production capacity (in MTPA) as per LoI / Vesting Order / Mining lease, if any prescribed	3
12.1.7. Details of Lease renewal(s), if any	NA
12.1.8. Other information, if any	This is a fresh Mining lease obtained through auction process

13. Status of approval of Mining plan Approved

14. Minerals to be mined

Name of Mineral	Classification	Production Capacity	Remarks
Iron Ore	Major	3	

15. Details of Total excavation (RoM) including Topsoil, Overburden, Mining waste, Rejects, etc.

15.1. Total excavation in MTPA	28.1617
15.2. Total Excavation in M.Cu.m/Annum	12.5292
15.3. Enter stripping Ratio	01:08
15.4. Other information, if any	Stripping Ratio:1:8.39

16. Mineral Reserves

Name of Mineral	Proved Reserves	Indicated Reserves	Inferred Reserves	Mineable Reserves	Remarks
Iron Ore	36.071	0	1.66	36.071	

Iron Ore	36.0/1	0	1.66	36.0/1
----------	--------	---	------	--------

17. Life of Mine (Years)

17.1. Life of the mine as per approved mining plan	14/00
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17.2. Life of the mine as per total estimated reserves, if any	30/00
--	-------

17.3. Other information, if any	The total mineral (including reserves and resources) is 84.743MT based on which the life of the mine will be around 30 years. First four years 2.0 MTPA and Fifth year onward 3.0 MTPA based on that life of mine is 30 years
---------------------------------	---

18. Type and method of Mining Method

18.1. Type of mining	Opencast
----------------------	----------

18.2. Method of mining	Mechanized
------------------------	------------

18.3. Other information, if any	
---------------------------------	--

19. Type of blasting, if any, to be adopted

19.1. Type of blasting	No blasting
------------------------	-------------

19.2. Mitigation measures for control of blast induced vibrations	NA
---	----

19.3. Other information, if any	NA
---------------------------------	----

20. Whether it is proposed to install beneficiation plant/Coal washery within the mining lease area?	No
--	----

21. Whether it is proposed to install crusher within the mining lease area?	Yes
---	-----

21.1. No. Of crushers	N/A
-----------------------	-----

21.2. Capacity of crushers	N/A
----------------------------	-----

21.3. Capacity of crushers	N/A	N/A
----------------------------	-----	-----

21.4. Total capacity of crushers	N/A	N/A
----------------------------------	-----	-----

22. Dumping strategy

Description	Area in Ha	Maximum height in m	Remarks
External dump	0	0	N/A
Internal dump	176.8537	0	The waste will be temporarily Back filled in the existing pits.
Topsoil dump/ storage	0	0	

23. Topsoil management

23.1. Total Topsoil excavated during the entire life of the mine (in Million Cubic Meter)	0
---	---

23.2. Utilization strategy of topsoil	Nil
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23.2. Utilization strategy of topsoil	NIL
23.3. Other information, if any	There is no topsoil available in the proposed operational area

24. Details of the Quarry/Mine Pit

24.1. Total Quarry Area (Ha)	355.56
24.2. Enter Area of final void (in Hectare)	62.06
24.3. Maximum Depth of final void (in meter)	35
24.4. Other information, if any	

25. Details of Transportation

25.1. Mode of transportation upto pit head	Dumpers/Tipper trucks
25.2. Mode of transportation from pit head to siding/loading	From pit head to Jetty by tipper trucks
25.3. Mode of transport from loading point to consumers	By barges (water way)
25.4. Other information, if any	

26. Details of reclamation/post mining land use

26.1. Plantation area (ha)	105.8894
26.2. Water body in Ha	20
26.3. Public use in Ha	33.42
26.4. Enter Other uses in Ha	0

Enclosures

24. Layout Plan showing the components of the project and green belt proposed; general location and specific location of the project along with coordinates	Bicholim Mineral Block Authenticated Cadastral Map 160223_compressed.pdf
25. Letter of Intent / Mining Lease	LOI_BICHOLIM MINERAL BLOCK_compressed.pdf
26. Schematic representation of the feasibility drawings which give information for EIA purpose	PLATE_3A_Surface_Plan.pdf

15. Additional Information

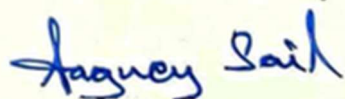
S. No.	Document Name	Remark	Document
1	WLS Distance Authentication letter	No WLS with in the 10 km areal distance from the lease boundary	WLS distance authentication letter and plan from DCF.pdf
2	Key Plan	Key Plan	Bicholim Mine Key plan (1).pdf
3	Surface Plan	Surface Plan 3A And 3B	Surface Plan_compressed.pdf
4	Covering Letter	Covering Letter	Application letter for TOR-KR new.pdf

Undertaking

17. I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information is found to be false or misleading at any

stage, the project will be rejected and clearance given if any to the project will be revoked at our risk and cost. In addition to the above, I hereby give undertaking that no activity/construction/expansion has been taken up

17.1. Name	Krishna Reddy
17.2. Designation	Chief Operating Officer-Mining
17.3. Company	VEDANTA LIMITED
17.4. Address	Sesa Ghor, 20 EDC Complex, Patto, Panjim
17.5. Date	16/03/2023



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District Disaster Management Plan of North Goa 2023**DISTRICT DISASTER MANAGEMENT PLANNORTH GOA -2023**

District Disaster Management Plan of North Goa 2023**Foreword**

India has been vulnerable, in varying degrees, to a large number of natural, as well as, human-made disasters on account of its unique geo-climatic and socioeconomic conditions. It is highly vulnerable to floods, droughts, cyclones, earthquakes, landslides, avalanches and forest fires. To cope with such disastrous event National Disaster Management Act 2005 mandates district authority to prepare disaster management plan at different levels. Goa, situated along Konkan coast of India, has a coastline of 131 kms. It has a partly hilly terrain with the Western Ghats rising to nearly 1200 mtrs. In some parts of the state. In the North, the Terekhol River separates Goa and Maharashtra. Karnataka lies to the South. The Arabian Sea is situated on the west and the Western Ghats in the east. The Tiswadi Island lies between the Mandovi and Zuari rivers, which are connected on the landward side by a creek. The island is triangular in shape that divides the harbour of Goa into two parts - Aguada at the mouth of Mandovi on the North and Mormugao at mouth of Zuari on the South.

Furthermore, this plan shall guide NGOs, Volunteer, private agencies and local bodies to perform their duties during the disaster.

I hope the implementation of this plan in Pre-disaster and Post-disaster phase will reduce the impact of hazard and it shall also act as a reference literature for systematic response during the disaster impact period.

(Ms. Mamu, IAS)

Collector/Chairperson DDMA North Goa

District Disaster Management Plan of North Goa 2023

Preface

The District Disaster Management Plan 2023 of North Goa district is prepared as per the guidelines provided by National Disaster Management Authority. This Plan incorporates the brief details of all the potential hazards of North Goa with their severity and frequency of occurrence. The roles and responsibility during three phases of disaster management cycle has been described of the officials from each department, NGOs, Volunteer and local bodies. Updated details of search & relief equipment and vehicles available at district level to Taluka level has been incorporated in this plan and all the necessary contact details of important officials has been updated. Moreover, the co-ordinates of villages which are vulnerable to water inundation or flooding situation have been included in this plan for the quick identification of affected villages for airlift purpose. Due to current Covid-19 outbreak, the response mechanism during any other catastrophic event with complete precaution has been described in this plan as per the guidelines provided by NDMA.

This Plan will be reviewed periodically to update details of all the equipment and contact details of officials.

District Disaster Management Plan of North Goa 2023

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Introduction.....	
1.1 Disasters and their management.....	
1.2 Aims and Objectives of North Goa DDMP.....	
1.3 The Scope of the Plan.....	
1.4 How to Use the Plan.....	
1.5 Evolution of the Plan.....	
1.6 Authority for the Plan.....	
1.7 Stakeholders and Their Responsibilities.....	
1.8 Approaches to Disaster Management.....	
1.9 Financial Support during the Disaster.....	
1.10 DDMP Review and Updation.....	
District Profile of North Goa.....	
Taluka wise Disaster Management Plans.....	
District Control Room.....	
Incident Response System.....	
District Communication Plan.....	

District Disaster Management Plan of North Goa 2023

Introduction

1.1 Disasters and their management:

Disasters are a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or manmade causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area. Disaster Management is a continuous and integrated process of planning , organising , coordinating and implementing measures which are necessary or expedient for- i) prevention of danger or threat of any disaster; ii) mitigation or reduction of risk of any disaster or its severity or consequences; iii) capacity building; iv) preparedness to deal with any disaster ; v) prompt response to any threatening situation or disaster; v) assessing the severity or magnitude of effects of any disaster ; vii) evacuation, rescue and relief ; viii) rehabilitation and reconstruction. Section 2 (d & e) of DM Act, 2005). A well-coordinated and conceived administrative and community response plays a vital role in alleviating the sufferings of the people by providing prompt relief. To accomplish this task, the existence of a comprehensive and well-researched Disaster Management Plan is of critical importance. The officials and other actors involved in disaster response can rely on the instructions and checklists spelt out the Plan and proceed efficiently and quickly in disaster management. This has the effect of not only speeding up the rescue and relief operations, but also inspiring confidence in the affected people. The Disaster Management Plan can, like a shining beacon, effectively guide the entire machinery engaged in relief/rescue operation and other disaster response activities and instil confidence and faith in the community at large to face the calamity courageously in a systematized manner.

1.2 Aims and Objectives of North Goa DDMP

Following are the broad objectives of the North Goa DDMP –

- a) To determine the risk and vulnerabilities associated with various hazards
- b) To identify the hazardous areas and to create appropriate strategies to address the issues in these areas
- c) To develop appropriate strategies for effective prevention and mitigation of disasters
- d) To build the capacity of people working in the field of disaster management
- e) To make the citizens aware of the disasters and their impact
- f) To define and assign roles and responsibilities to various stakeholders associated with disaster management for pre-disaster and post-disaster phases
- g) To develop and maintain arrangements for accessing resources, equipment,

District Disaster Management Plan of North Goa 2023

- supplies, and funding in preparation for disasters
- h)* To defines the risks and Vulnerabilities of the citizens of the district to different disasters.
 - i)* To Identifies the private and public sector parties with prime and supporting responsibilities to reduce or negate these vulnerabilities
 - j)* To mainstream disaster management concerns into the developmental planning process
 - k)* To define actions to be taken by these parties to avoid or mitigate the impact of possible disasters in the district

						Bicholim
No.	Name of Village/ City	Name of the wards likely to be affected	No. of Houses & Population likely to be affected		Location for Shelter for affected person.	Name of the health centres in the area.
1	2	3	4		5	6
	Villalage	Wada	House	Population		
28	Surla	Rumad, Kazan, Chavadi	40	220	G.P.S., Surla, Govt. High School, Tagore Educational Institue, Kothambi, Surla	I.D.Hospital Tisk, Usgaon
29	Vaiguinim	Nil	Nil	Nil	G.P.S Vaingini	Sub-Health Centre, Mayem
30	Velguem	Nil	Nil	Nil	Bharti Bandodkar Primary School, Velguem, Siddarth Bandodkar Higher Sec. School, Velguem	Community Health Centre, Sanquelim
31	Viridi	Kharekazan, Gaonkarwada, Deulwada, Sawaiwada, GhadiWada	15	60	Multipurpose Hall Sanquelim	Communitr Health Centre, Sanquelim

LANDSLIDES DUE TO MINING

Sr. No	Name of Village	Name of Hamlet Likely to be affected	No. of Houses likely to be affected	Crops likely to be affected
1.	2.	3.	4.	5.
1.	Mulgao	Mulgao. Sy.No.116 & 117	80 Houses	55 hectares
2.	Advalpal	Gaonkarwada Sy. No.34/1 to 34/55,122,125	25 Houses	20 hectares
3.	Maem	Poira, Kelbaiwada.	30 Houses	25 hectares
4.	Pale	Ambeshi, Nawarwada, Deulwada.	75 houses	30 hectares
5.	Velguem	Gaonwada,Rumadwada, Gaonkarwada.	55 houses	25 hectares

19	Pale	Shri. Mohan Ganesh Tari Fair Price Shop-No -37	8698073528
20	Piligao	Piligao V.K. S. S. Society Fair Price Shop-No -12	Piligao 363226/ 9823992654/ 7798909059
21	Salem	Smt.Shilpa Umesh Raut Fair Price Shop No. 4	Salem 9403749680
		Shri. Rahul Rama Naik Fair Price Shop -46	9545470718
22	Sanquelim	Maharashtra V.K. S. Society Ltd. Fair Price Shop -15	Sanquelim 9049598751
23	Sarvan	Carapur-Sarvan V.K.S. Society Fair Price Shop -16	Sarvan Ph No 9923391254/ 9850462122
24	Sirigao	Shri. Tukaram. R. Gaonkar Fair Price Shop-33	Sirigao Ph. No 2215571/9767737341
25	Surla	Surla Kothambi V.K.S.S. Society Ltd.Fair Price Shop No-23	Surla Ph. No 2372601 9637943693
		Navdurga V K S Society Ltd. Fair Price Shop No.24&26	08322372244/909691619 4
		Navdurga V K S Society Ltd. Fair Price Shop No 42&28	08322372244/909691619 4
26	Viridi	Shri Sajro.U. Parab Fair Price Shop No-22	Viridi 365027/ 9922910895
27	Velguem	Velguem Mah Consumer Co-op Society Ltd – Fair Price Shop No- 38	Pale 372244 9922988764/9823872397

**LIST OF SURVEY NOS. VILLAGE WISE OF LOW LYING AREAS IN
BICHOLIM TALUKA WHICH REMAIN ALWAYS UNDER WATER
DURING MONSOON**

Sr. No.	Name of Village	Survey Number
1.	Advalpal	40 to 44 , 46,48,89,92,93,
2	Amona	4 to 21,28,30 to 35 68,83,90 to 92 96,97,99,100,102,103,105,106,110 to 112,115 to 119,122 to 126, 128 to 184, 191 to 194
3	Aturli	20/1
4	Bicholim	1 to 6, 8 to 36, 37,45 to 48, 49, 55, 92,107, 108, 109, 112,
5	Bordem	2/53,54,66,69,70 & 71, 4, 5/1,2,3, 6/13 17,18,19 & 20 ,38,39,137,138, 139, 140,141/1,2,3,4,5,6, & 7, 142/1,2 & 143/2
6	Lamgao	2, 3, 4, 5, 6,8, 11,12, 28, 30, 31 to 38, 40 to 43,46, 101to 114
7	Carapur	2,3,5,6,17,19,21,22,24,30,32,39,51,61,69.
8	Sarvan	11,26,27,28,31,32,34,59,61,62,115,116,132,139,141,142
9	Cotombi	2,3,8,9,10,11,19,20,27,31,40,51,52,53,57,58,59.
10	Cudnem	33,34,54,59,67,68,69,72,78,79,92,93.
11	Curchirem	244.

Jagney Sail

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Chapter-2

PROJECT DESCRIPTION



**Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block**

2.0 PROJECT DESCRIPTION

2.1 TYPE of PROJECT

The proposed project falls under screening category of 'A' [EIA notification 2006, Sl. No 1(a) of Schedule: Mining of Minerals] i.e. >250 ha of mining lease area in respect of non-coal mine lease. The project requires prior Environmental Clearance from MoEF&CC to execute the lease.

It is an opencast Iron ore mining project using HEMM. There is no Drilling and Blasting involved in this project.

YEAR - WISE PRODUCTION DETAILS

The Goa Government has auctioned the Block I- Bicholim Mineral Block as a fresh Lease. And LOI is issued to Vedanta Ltd. MoEF & CC has considered this project as a Green Field Project The mine operations will commence after obtaining necessary Statutory clearances and execution of lease Deed.

2.2 NEED FOR THE PROJECT

The present mining project involves production of 3.0 million tonnes of Iron Ore per annum, the life of the mine shall be 30 years and may enhance based on the results of exploration planned during the Mining Plan period. The lease is valid till 50 years.

The finished product, i.e., Dry crushed/screened products (Lumps & Fines)/iron ore /ROM will be used in the company owned pig iron plant and sold to the domestic buyers or domestic consumption & export . This project is expected to yield a positive impact on the socio-economic environment of the region. It helps in sustainable development of this area including further development of physical infrastructural facilities. The opening of this mine will boost the economy of the State and improve socio-economic status of the region.

Besides, the direct and indirect employment opportunities, this project will also generate the revenue to the state in terms of taxes and royalty, DMF and the country will be benefited in terms of income tax and export duty and NMET.

The Lessee shall extend social benefits like supply of water for irrigation purposes, health care measure, and educational benefits to the neighboring villagers.



**Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block**

2.3 LOCATION OF THE PROJECT

The project located in Bicholim, Bordem, Lamgao, Mulgao, and Mayem & Sirigao villages of Bicholim Taluka, North Goa District, Goa State as shown in the **Plate No.1**. DGPS & key plans are enclosed vide **Plate No.2** & **Plate No.3** respectively.

2.3.1. ENVIRONMENTAL SETTING

The geographical aspect of the Mine Location is given below.

Table 2.1: Environmental Setting

Land Details & Survey Nos	478.5206 Ha Sy.Nos : Bordem : Parts of Survey No. 19, 21, 23, 31, 32, 33, 34, 40, 41, 42, 43, 44 Bicholim : Survey No. 80, 81 & Parts of Survey No. 72, 77, 78, 79, 82, 83, 84, 86, 88, 89, 90, 95, 96 & 99 Lamgao : Survey No. 20, 24, 25, 26 & Parts of Survey No. 1, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 27, 28, 29, 30 & 46 Mayem : Survey No. 145, 164, 165 & Parts of Survey No. 84, 85, 86, 114, 142, 143, 144, 146, 162, 163, 166 & 167 Mulgao: Survey No. 34, 62, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 89, 91, 110, 114, 115, 116 & Parts of Survey No. 33, 35, 48, 61, 63, 79, 80, 81, 86, 88, 90, 92, 93, 94, 95, 96, 101, 102, 103, 104, 109, 111, 112, 113, 117, 118 & 124 Sirigao : Parts of Survey No. 70, 75, 76, 77, 78, 79, 80, 81 & 82	
Geographical Coordinates	Latitude 15° 34' 20.518" to 15° 36' 54.018" N & longitude of 73°54' 04.754" to 73° 57' 09.51" E.	
Survey of India (SOI) Topo-sheet No	48 E/14	
Water requirement	664 KLD	
Power requirement	5.8 MW	
Sanctuary / Tiger Reserve/Elephant / any other Reserve Forest	No sanctuary /Tiger reserve within study area	
	Mayem Forest	Common Boundary with the lease area
	Kharpal RF	6.7 Km
	Kasarpal RF	5.1 Km
	Ambadgaon RF	7.6 Km
Biosphere Reserve	None	
Water Bodies	Asnora river	Touching lease boundary at one point
	Bicholim River	0.23 Km
	Mandovi River	2.3 kms
	Chapora River	7.5 km



**Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block**

	Mayem Lake	0.46km
Defence Installation	None	--
Nearest airport	Mopa	27.3 Kms
Nearest Railway Station	Tivim	10.5 kms
Nearest Highway	SH-1	0.65 KM from ML area
Seismic Zone	III	--
Nearest Habitat	Within the lease	Min Buffer of 50mts shall be provided and no drilling and blasting shall be carried out.
Environmental Protection Cost	Capital Cost: Rs. 72 lakhs Recurring Cost: Rs. 621 Lakhs	--
Project Cost	25000 lakhs	
Man Power Requirement	716	Both Direct & Indirect employment
Archaeological monuments/ places of worships/public utilities etc.	Namuzgah/Idgah ;	Archaeological monuments Within ML area. (200m buffer will be maintained from Idgah;
	Lamgao caves	300m buffer from Lamgao caves)
	Sateri Temple Mhatrai temple Kelbai Temple Mahadev Temple Lairae Temple (Old)	With in the ML Area
	Shri Lairae Temple(new)	0.86 km from ML Area.
	Saptakoteshwar temple and at Narve	2.5 km There are other monuments within 10km radius namely temples, Churches at Old Goa, Site at Gujir,
	Amthane Dam	7 kms
	Fort at Khorjuvem	2 kms, there are few other forts also within study area like fort at Colvale & Sanquelim
	Public ferry point at sarmanas at Pilgao village at an aerial distance of 2.45 km	
Coastal Regulation Zone (CRZ)	--	--



Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block

Distance from the HFL of the river in m	Asnora river is touching one part of the lease boundary		Asnora river is touching one part of the lease boundary but the elevation difference is min 10mts.		
Nearest School	Mulgao Government Primary School (2 schools)		Within Lease (Gaonkarwada School is non functional since last few years; A buffer of 120m will be maintained from Manaswada habitation wherein the school is located.)		
	Lamgao Government Primary School		0.015 kms outside the mine lease		
List of Schools	Sr. No.	School Name	Strength	Distance from block boundary in meters	Direction from Block
	1	Ideal High school, Pilgao	292	1525	S
	2	Govt. high school Sirigao	56	874	W
	3	Govt. high school, Mulgao	117	608	N
	4	Govt. high school, Shriodwadi, Mulgao	50	702	N
	5	Vijyanand high school, Mayem	94	3958	S
	6	Shree Mahamaya High school, Mayem	170	1245	SW
	7	Our lady of grace high school, Bicholim	1106	505	NE
	8	Shree Shantadurga high school, Bicholim	1286	616	NE
	9	Radhakrishn high school, Bicholim	343	307	NE
Mangrove	Asnora Creek Mangrove		210 mts from ML area		



**Environmental Impact Assessment & Environment Management of Block-I
Bicholim Mineral Block**

Industries	Cashew factory within the mineral block at Bicholim (85m buffer will be maintained)	Iron ore Beneficiation plant of SMCL at a distance of 1.2 km from mineral block; Iron ore barge loading jetty of SMCL at aerial distance of 3km There are other industrial areas within the study area namely Bicholim Industrial estate (0.42km), and other estates at Mapusa, Thivim, Colvale and Corlim beyond 8km.
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2.3.1.1 Geology

As per Geological Survey of India (GSI) studies, Bicholim Mine area forms a part of Bicholim-Sirigao type deposit. Rock formation in this area indicate a major overturned anticlinal fold extending over the length of about 6.5 km. Iron ore was generally found to occur as soft banded beds in the Precambrian meta sedimentary formation. Hard lumpy ores occur close to surface in laterite 5 to 10 m depth followed by soft laminated and friable powdery ores in deeper portions upto 200 m. The general strike of ore body is NW-SE and the general dip of the ore body is NE – NW. The lithology of geological formation is given below

Table 2.2 The lithology of geological formation

Lithology	
Type	Depth
Laterite	10-15m
Lumpy Laterite	05 to 10m
Friable Powdery Ores	20 to 45m
Limonitic Clays	5 to 10m
Phyllite Clays	30 to 100m
Manganiferous Clays	10 to 30m
Intrusive / Dykes	02 to 15m



Doc. No.: MES/EIA/SEC-1/23-03

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Sensitivity: Public (C4)

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Vinita

IN THE HIGH COURT OF BOMBAY AT GOA
MISC. CIVIL APPLICATION NO. 102 OF 2025-FILING
IN
PUBLIC INTEREST LITIGATION WRIT PETITION NO. 6 OF
2024.

ANIL DATTA SALELKAR

... Applicant.

Versus

THE DIRECTORATE OF MINES AND
 GEOLOGY THR ITS DIRECTOR AND 6 ORS.

... Respondents.

Mr Om D'Costa and Mr Sherwyn Correia, Advocate for the applicant.

Mr D. Pangam, Advocate General with Mr D. Shirodkar, Additional Government Advocate for respondent Nos.1 to 5.

Ms Simran Khadilkar, Advocate for respondent No.7.

Mr R. Chodankar, Advocate for respondent No.8.

Mr Yogesh Nadkarni and Mr Nilay Naik, Advocates for respondent No.9.

Mr Shivan Desai, Advocate for respondent No.10.

Ms Normal Alvares, Senior Advocate with Ms Malisa Simoes, Advocate for respondent no.16.

WITH
MISC. CIVIL APPLICATION NO. 229 OF 2025-F
IN
PUBLIC INTEREST LITIGATION WRIT PETITION NO. 6 OF
2024.

M/S VEDANTA LIMITED THR. ITS AUTH.
 SIGNATORY DHIRAJKUMAR NAMDEO
 JAGDISH

.... Petitioner.

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VS

THE DIRECTORATE OF MINES ANDRespondents.
GEOLOGY THR ITS DIRECTOR AND 16 ORS.

Mr Shivan Desai and Ms T. Menezes, Advocate for the applicant.

Mr D. Pangam, Advocate General with Mr D. Shirodkar, Additional
Government Advocate for respondent Nos.1 to 5.

Mr Yogesh Nadkarni and Mr Nilay Naik, Advocates for respondent
No.7.

Mr Om D'Costa and Mr Sherwyn Correia, Advocate for respondent
no.10.

Mr Gaurish Malik, Advocate for respondent no. 11 to 14.

**CORAM: M. S. KARNIK &
NIVEDITA P. MEHTA, JJ.**

DATE: 13th February 2025.

P.C

1. We have heard Mr O. D'Costa, learned counsel for the applicant in Misc. Civil Application No. 102/2025/F, Mr S. Desai, learned Counsel for the applicant in Misc. Civil Application No.229/2025/F, Ms N. Alvares, learned Senior Advocate for respondent no.16, Mr D. Pangam, learned Advocate General for the State, Mr Y. V. Nadkarni, learned counsel for respondent. 9, Ms S. Khadilkar, learned Advocate for respondent no. 7 and Mr R. Chodankar, learned counsel for respondent no. 8.

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2. Misc. Civil Application No.102/2025/F is filed by one of the villagers opposing the transportation of the ore. The following reliefs are prayed:-

“a. Direct the D.M.G. and the Police authorities to ensure that ore transportation from MB-I by M/s. Vedanta Ltd. is carried out strictly during the working hours only in terms of the S.O.P. of the D.M.G;

b. Direct the D.M.G. and the Police authorities to ensure that ore transportation from MB-I by M/s. Vedanta Ltd. is not carried out on the approx. 850 m length portion of the route presently being used, i.e. NBP Gate No. II till Matwada Junction, which is not approved under the EC and which passes through the settlement of the Pilgao village;

c. For any other reliefs this Hon'ble Court may be pleased to pass.”

3. So far as prayer (a) is concerned, learned Advocate General submitted that the State shall ensure that the transportation of the ore by M/s. Vedanta Ltd will be carried out strictly during the working hours in terms of EC/SOP of DMG. So far as prayer clause (a) is concerned the same is worked out in view of the assurance given by the learned Advocate General.

4. On the last date of hearing it was brought to the notice of this Court that the State had permitted transportation of the ore even at night which is contrary to the terms of the EC. Learned Advocate

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General has assured this Court that such permission was granted under some misconception for facilitating the transportation so as to avoid any inconvenience to the public at large travelling during the day time. However, learned Advocate General submits that such permission has since been withdrawn and the State shall ensure that the transportation will be strictly during working hours and in accordance with the terms of EC/SOP of DMG. It is further assured by learned Advocate General on instructions that strict action will be taken against the mine owners/transporters, if it is noticed that any transportation is done contrary to the terms of EC/SOP or as per the directions issued by this Court. The statement is accepted as an undertaking to this Court. Learned Advocate General has placed on record a copy of communication dated 11.12.2024 which permitted transportation of ore during night time. Learned Advocate General has already made a statement that said permission for transportation of ore during the night time stands withdrawn.

5. We make it clear that if it comes to the notice of this Court that any transportation of the ore is carried out beyond the hours stipulated in the EC/SOP, this Court will take strict action against the concerned officials of the State Government who are responsible for effecting compliance of the terms of the EC and the directions of this Court.

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6. Prayer clause (b) is for a direction to the D.M.G. and the Police authorities to ensure that ore transportation from MB-I by M/s Vedanta Ltd is not carried out on the approximately 850 m length portion of the route presently being used, i.e. NBP Gate No. II till Matwada Junction, which is not approved under the EC and which passes through the settlement of Pilgao Village.

7. At this stage we may note the detailed order passed by this Court in PIL on 29.6.2024 wherein several directions were issued. Pursuant to this order when the actual transportation of the ore commenced, it was grievance of the villagers that the stretch of private road admeasuring approximately 900 mts which is private road, in respect of which respondent nos. 11 to 14 claim to be tenants, was being used.

8. Learned Senior Advocate Ms Alvares appearing for the petitioners in the PIL submitted that M/s Vedanta Ltd in their application for getting the EC described the said road as a dedicated corridor. This information, according to her, was misleading. It is submission of learned Senior Advocate that this road could never have been projected as dedicated corridor as the same was always in possession and occupation of respondent nos. 11 to 14 as tenants. It is submitted that M/s Vedanta Ltd unauthorisedly attempted to transport the ore by trucks through this route. There are Civil proceedings

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initiated by private owners/tenants of the road restraining M/s Vedanta Ltd from using the said road.

9. Learned Advocate General submitted that as a result of restraint put by villagers on the user of the road by the transport operators, there arose a law and order situation. Efforts were undertaken to resolve the matter. Our attention is then drawn by learned Advocate General to the affidavit filed on behalf of respondent nos. 1 and 2. Paragraphs 7, 8 and 9 of the affidavit are relevant, read thus:-

“7 As regards the other contention that the route on which the transportation is being done is not the one which is approved in the EC, I say that the transportation could not be done from that route on account of objections and obstructions by villagers, who forcibly blocked the said route which resulted in law and order situation. Meetings were held by the Deputy Collector in order to try and resolve the issue but the same has not been resolved yet. Due to this, the party applied for transportation by the other available route, which is a public road. This new route is the same route approved in EC with a small portion of deviated route as the original route was blocked by the villagers. The same was considered by the authorities and permit was granted allowing transportation on this route.

8 I say that the permit for the other route was granted after inspection conducted by an inter-departmental committee comprising officials from the Police Department, Public Works Department, Transport Department, Office of the Deputy Collector, Bicholim, Goa State Pollution Control Board and Directorate of Mines & Geology. I say that the Committee recommended that

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transportation through the alternate route may be allowed. The same was considered by the Government, which approved the proposal and accordingly, the permit was granted by this Respondent. I say that grant of approval for the routes is within the domain of the State authorities, which have considered the relevant aspects and examined the feasibility, after conducting inspection.

- 9 *I say that the fact that the EC refers to a particular route does not mean that no transportation can be permitted by the State authorities from a different route. I say that it is pertinent to note that the route in question is a public road. I say that no person can be prevented from using the public road. I say that adequate safeguards are in place to keep a check on the transportation activity, including monitoring by the GSPCB.”*

10. Ms Alvares made an attempt to submit that transportation of ore should be strictly in accordance with EC/SOP and no deviation is permissible. It is her submission that if the State Government if at all wanted to permit M/s Vedanta Ltd to use an alternate route, the appropriate remedy for the State Government was to have approached the authority which granted that EC for necessary modification.

11. Learned Advocate General therefore submitted that it is not open for this Court to prohibit the transportation of ore through the Major District Road when the State Government has approved such transportation. It is submitted that merely because there is minor deviation from the permission granted by the EC, does not necessarily

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mean that this application should be entertained, as the State is empowered to permit the transportation in a Major District Road. Learned Advocate General placed reliance on the judgment in the case of Saghir Ahmad Vs State of Uttar Pradesh and others (1954) 2 SCC 399 in support of his submission that just because EC specifies the route, does not mean that State cannot permit the transportation of ore from public road.

12. A reference needs to be made to paragraph 9 of the judgment which reads thus:-

“9. It is not disputed that the Bulandshahr-Delhi route is a part of the Grand Trunk Road which is a public highway. According to English law, which has been applied all along in India, a highway has its origin, apart from statute, in dedication, either express or implied, by the owner of land of a right of passage over it to the public and the acceptance of that right by the public [Pratt & Mackenzie on Law of Highways, 19th Edn., p. 13] . In the large majority of cases this dedication is presumed from long and uninterrupted user of a way by the public, and the presumption in such cases is so strong as to dispense with all enquiry into the actual intention of the owner of the soil and it is not even material to enquire who the owner was [Ibid, p. 28] . The fact that the members of the public have a right of passing and repassing over a highway does not mean however that all highways could be legitimately used as foot passages only and that any other user is possible only with the permission or sufferance of the State. It is from the nature of the user that the extent of the right of passage has to be inferred

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and the settled principle is that the right extends to all forms of traffic which have been usual and accustomed and also to all which are reasonably similar and incidental thereto [Ibid, p. 35] . The law has thus been stated in Halsbury's Laws of England [Vol. 16, p. 185] :

“Where a highway originates in an inferred dedication, it is a question of fact what kind of traffic it was so dedicated for, having regard to the character of the way and the nature of the user prior to the date at which they infer dedication; and a right of passage once acquired will extend to more modern forms of traffic reasonably similar to those for which the highway was originally dedicated, so long as they do not impose a substantially greater burden on the owner of the soil.”

There can be no dispute that the Grand Trunk Road which, as a public highway, has been in existence since the 15th Century A.D. has been used for all sorts of vehicular traffic that were in vogue at different times. Motor vehicles were certainly not known when the road came into existence but the use of motor vehicles in modern times as means of locomotion and transport could not, on the principle stated above, amount to an unwarrantable extension of the accustomed user to which the highway is subjected. If there is any danger to the road by reason of such user, or if such user by one interferes with the user by others, it is up to the State to regulate the motor traffic or reduce the number or weigh of vehicles on the road in any way it likes, and to that no objection can possibly be taken. But the right of the public to use motor vehicles on the public road cannot, in any sense, be regarded as a right created by the Motor Vehicles Act. The right exists anterior to any

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legislation on this subject as an incident of public rights over a highway. The State only controls and regulates it for the purpose of ensuring safety, peace, health and good morals of the public. Once the position is accepted that a member of the public is entitled to ply motor vehicles on the public road as an incident of his right of passage over a highway, the question is really immaterial whether he plies a vehicle for pleasure or pastime or for the purpose of trade and business. The nature of the right in respect to the highway is not in any way affected thereby and we cannot agree with the learned Advocate General that the user of a public road for purposes of trade is an extraordinary or special use of the highway which can be acquired only under special sanction from the State.”

(emphasis supplied)

13. Learned Advocate General further pointed out that under the Constitution of India, contract carriers as well as the common carriers would occupy the same position so far as guarantee under section 19(1) (g) is concerned and both are liable to be controlled by regulations under clause 6 of the Article.

14. Learned Advocate General further submitted that even otherwise, major part of the transportation is over the major district road and that the company's claim to the dedicated corridor is merely 900 mts, in such circumstances State Government permitted M/s Vedanta Ltd to use alternate road from the same major district road

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to the extent of 900 mts and that too after an informed decision was taken by the State Government.

15. Mr Desai appearing for the M/s Vedanta Ltd as well as Mr Nadkarni appearing for the transport operators submitted that village road was being used for almost 40 to 50 years by the erstwhile mining companies for transportation of the ore. It is submitted that respondent no. 11 to 14 then had no issue with the transportation as they were employed those mining company. It is submitted that now as they are no longer employed, they have taken law in their hand.

16. Be that as it may, we are not inclined to entertain the application made by Mr Anil Salelkar or M/s Vedanta Ltd in a disposed of PIL. The MCA filed by M/s Vedanta Ltd seeks the following reliefs:-

“a. Directing Respondent No. 1 & 6 to permit transportation in terms of the EC including the conditions pertaining to the number of trips and hours of transportation in the route indicated in the EC dated 23/01/2024 or the additional route indicted and approved by the State Government with same trips and hours of transport as indicated in the EC dated 2301 2024 which is subject matter of the above application.

b. Directing Respondent no. 10 to 14 to ensure that judgment and order dated 29/06/2024 is not

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subverted or breached in any manner or not to create any impediment in the transportation by the Applicant via designated route otherwise than in terms of law.

c. Pending hearing and final disposal of this matter this Hon'ble Tribunal be pleased to grant Ad interim in terms of prayer clause (a) and (b)."

17. It is open for M/s Vedanta Ltd to seek reliefs prayed in the MCA in appropriate proceedings before the appropriate forum.

18. So far as road deviation permitted for iron ore transportation is concerned, it is open for the applicant in MCA No.102/2025/F to agitate the same before appropriate forum in appropriate proceedings as it is the contention that such deviation is permitted without taking into consideration the carrying capacity of the road, inconvenience that will be caused to the existing users of the road who are mainly villagers. It is not possible for us to examine these contentions in a disposed of PIL which have been brought before us by way of the present application.

19. Keeping the remedies of the applicants open, the Misc. Civil Applications are disposed of. All contentions are kept open.

20. Learned counsel for M/s Vedanta Ltd on instructions submits that an undertaking will be filed within one day after this order is

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uploaded by M/s Vedanta Ltd and/or transporters of the ore that they are not resorting to any transportation of the ore at night or beyond permissible working hours stipulated.

21. Mr Om D'Costa filed an affidavit on behalf of respondent nos.10 to withdraw the incorrect statement made in the affidavit dated 29.1.2025. Though the learned counsel for the M/s Vedanta Ltd opposed such request made by Anil Salelkar, we find that apology being unconditional and absolute, the same is accepted. We are not inclined to pass any order on the request made by the applicant for substitution as we are not inclined to entertain the MCA in a disposed of PIL.

22. Applications stand disposed of. No costs.

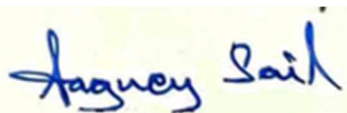
NIVEDITA P. MEHTA, J.

M. S. KARNIK, J.

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13th February, 2025

Signed by: VINITA VIKAS NAIK
Designation: Personal Assistant
Date: 18/02/2025 20:24:49



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112

Aagney Sail <aagneysail@gmail.com>

Rejoinder to Reply of R3 in Appeal No. 73/2024 (WZ) - Next date is 20.03.2025

Aagney Sail <aagneysail@gmail.com>

Thu, Mar 20, 2025 at 2:47 PM

To: secy-moef@nic.in, ms-gspcb.goa@nic.in, Shankar Swaminathan <shankar@chambers.net.in>, comp.sect@vedanta.co.in, MK.Reddy@vedanta.co.in, Chief Secretary <cs-goa@nic.in>, Legal Monitoring Cell <lmc.moefcc@gov.in>, Rahul Garg <rahul.garg@mgklegal.com>, ngt@mgklegla.com

To,

1. THE MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE,
THROUGH ITS SECRETARY, INDIRA PARYAVARAN BHAVAN, JOR BAGH ROAD, NEW DELHI - 110003,
EMAIL ID – secy-moef@nic.in, ngt@mgklegla.com, rahul.garg@mgklegal.com
CONTACT NO. – 011-24645586. ...RESPONDENT NO. 1

2. THE GOA STATE POLLUTION CONTROL BOARD,
THROUGH ITS MEMBER SECRETARY,
NEAR PILERNE INDUSTRIAL ESTATE,
OPPOSITE SALIGAO SEMINARY,
SALIGAO, BARDEZ, GOA – 403511,
EMAIL ID- ms-gspcb.goa@nic.in
CONTACT NO. - 0832-2407700. ...RESPONDENT NO. 2

3. VEDANTA LIMITED,
20, SESA GHOR, EDC COMPLEX,
PATTO CENTRE, PANAJI, GOA - 403001
EMAIL ID: shankar@chambers.net.in, comp.sect@vedanta.co.in, MK.Reddy@vedanta.co.in
CONTACT NO. - 9483211966, 7875874915, 022-66434500 ...RESPONDENT NO. 3

4. THE STATE OF GOA,
Through its Chief Secretary,
Having office at Secretariat,
Porvorim, Goa - 403521,
Email id: cs-goa@nic.in,
Contact No. - 0832-2419402....RESPONDENT NO. 4

To All concerned,

Please find attached the Rejoinder to the Reply of Respondent No. 3 along with its annexures. An email confirming the attached file will be highly appreciated.

Thanking You,

Adv. Aagney Sail
Counsel for Appellants
Mobile: 09810076618(M)



R3 Rejoinder FINAL.pdf

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