

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
M.A No. 94/2022 in Original Application No. 113/2020**

**IN THE MATTER OF: -**

Ramesh Chander Verma & Ors.

...Applicant(s)

VERSUS

State of Uttar Pradesh and Ors.

...Respondent(s)

**INDEX**

| <b>S NO.</b> | <b>PARTICULARS</b>   | <b>PAGE NO.</b> |
|--------------|--|-----------------|
| 1.           | REPLY AFFIDAVIT ON BEHALF OF RESPONDENT NO. 1 THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE | 1-4             |
| 2.           | ANNEXURE – R1/1<br>Copy of the EC dated 23.03.2016   | 5-13            |
| 3.           | ANNEXURE – R1/2<br>Copy of the Expansion EC dated 27.07.2022   | 14-17           |
| 4.           | ANNEXURE – R1/3<br>Copy of the Expansion EC dated 07.02.2024   | 18-33           |
| 5.           | ANNEXURE – R1/4<br>Copy of the Office Memorandum dated 25.11.2022                                    | 34-36           |
| 6.           | ANNEXURE – R1/5<br>Copy of the letter dated 13.09.2024   | 37              |
| 7.           | ANNEXURE – R1/6<br>Copy of the monitoring report dated 16.12.2024                                    | 38-99           |
| 8.           | ANNEXURE – R1/7<br>Copy of the letter dated 14.01.2025   | 100-102         |

THROUGH

  
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New Delhi

Dated 07.02.2025

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**REPLY AFFIDAVIT ON BEHALF OF RESPONDENT NO. 1 THE  
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CHANGE**

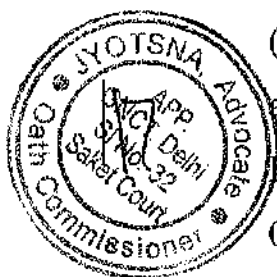
I, Pankaj Verma S/o Shri R. S. Verma presently working as Scientist 'F' in the Ministry of Environment, Forest & Climate Change (hereinafter referred to as "MoEF&CC"), Government of India, New Delhi-110003, do hereby, in my official capacity, solemnly affirm and state on oath as under-



1. That, I am acquainted with the facts and circumstances of the instant case and duly competent to swear the present affidavit on behalf of the Ministry of Environment, Forest & Climate Change based on the official records maintained therein.
2. It is humbly submitted that, all the averments made in the instant Original Application are denied except those, which are specifically admitted herein this Reply Affidavit.

*Pankaj Verma*

3. It is humbly submitted that the grievance raised in the Original Application is regarding the dumping of overburden by the Khadia Project of Northern Coalfields Limited (NCL) at Nawatola village, Khadia, in District Sonbhadra, Uttar Pradesh. The Applicant contends that the overburden is being dumped approximately 40 meters from the village, which is home to thousands of residents. Consequently, the villagers are facing significant challenges, including severe dust pollution, leading to widespread air contamination and serious health issues.
4. It is humbly submitted that the Answering Respondent has granted an Environmental Clearance (hereinafter referred to as "EC") to the project "Khadia Opencast Coal Mine Expansion Project from 10 MTPA to 14 MTPA in an area of 1640 ha located in District Sonebhadra (WP) and in Tehsil Singrauli, District Sidhi (MP) of M/s Northern Coalfields Limited vide letter no. J- 11015/255/2006-IA-II (M) dated 23.03.2016. A copy of the EC dated 23.03.2016 has been annexed herewith as **Annexure-R1/1**. Subsequently, two Expansion ECs were granted to the project vide letter dated 27.07.2022 and 07.02.2024. Copies of the Expansion ECs dated 27.07.2022 and 07.02.2024 have been annexed herewith as **Annexure -R1/2** and **Annexure -R1/3**.
5. It is humbly submitted that the Answering Respondent has been following a set procedure for post-Environmental Clearance Monitoring and Compliance of projects based on the Standard Operating Procedure (hereinafter referred to as "SoP") established vide Office Memorandum dated 25.11.2022. A copy of the Office Memorandum dated 25.11.2022 is annexed herewith as **Annexure -R1/4**.



*Paulraj Verma*

6. It is humbly submitted that, in line with the above-mentioned SoP, the Answering Respondent vide letter dated 13.09.2024 requested RO, Lucknow to furnish a factual status report concerning the issues raised in the Original Application, along with a condition wise compliance status report (s) for the ECs associated with this project. A copy of the letter dated 13.09.2024 has been annexed herewith as **Annexure-R1/5**.

7. It is humbly submitted that, pursuant to the Ministry's letter dated 13.09.2024, the RO Lucknow conducted a site inspection on 27.11.2024 and 28.11.2024. Based on observations made during the inspection, an inspection report (herein after referred to as "IR") was submitted to the Answering Respondent vide letter dated 16.12.2024. A copy of the monitoring report dated 16.12.2024 is annexed herewith as **Annexure-R1/6**.



It is humbly submitted that the IR was examined by the Ministry, and it was observed that several conditions of the Environmental Clearance (EC) were reported as either 'partially complied' or 'not complied' by the Project Proponent. Accordingly, vide letter dated 14.01.2025 the Answering Respondent directed the Project Proponent to submit a clarification or an Action Taken Report (ATR) addressing the observed non-compliance within 30 days from the date of issuance of the letter. The clarification/ ATR from the Project Proponent is currently awaited. A copy of the letter dated 14.01.2025 has been annexed herewith as **Annexure-R1/7**.

9. It is humbly submitted that, the present reply affidavit may kindly be taken on record and into consideration and the Hon'ble Tribunal may

*Pradyumn*

pass appropriate Order(s), direction(s) as deemed fit and proper under the facts and circumstances of the present case.

10. It is humbly submitted that, the Answering Respondent seeks leave to make additional submissions, if required, during the course of the proceedings.

I IDENTIFY THE DEPONENT WHO SIGNED THUMB MARK AS PER AFFIDAVIT WHO SIGNED BY THE DEPONENT IN HIS PRESENCE  
**VERIFICATION**

*Pankaj Verma*  
**DEPONENT**  
(पंकज वर्मा)  
**(PANKAJ VERMA)**  
वैज्ञानिक 'एफ' /Scientist 'F'  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Min. of Environment, Forest and Climate Change  
भारत सरकार, नई दिल्ली  
07 FEB 2025

I, the above named Deponent, do hereby verify that the contents of the above affidavit are true and correct to my knowledge as per the records of the answering respondents. No part of it is false and nothing material has been concealed there from. Verified at New Delhi on this 07<sup>th</sup> day of February 2025.



*Pankaj Verma*  
**CERTIFIED THAT THE DEPONENT**  
Shri / Smt. / Knr.....  
S/o, W/o, D/o.....  
R/o.....  
Identified by Shri.....  
Has solemnly affirmed BEFORE ME at  
Delhi on ..... St. No.....  
that the contents of the affidavit which  
have been & explained to him are  
true and correct to the knowledge  
*[Signature]*  
Oath Commissioner Delhi

*Pankaj Verma*  
**DEPONENT**  
(पंकज वर्मा)  
**(PANKAJ VERMA)**  
वैज्ञानिक 'एफ' /Scientist 'F'  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Min. of Environment, Forest and Climate Change  
भारत सरकार, नई दिल्ली  
Govt. of India, New Delhi  
07 FEB 2025

343

No. J-11015/255/2006-IA-II (M)

Government of India

Ministry of Environment, Forest & Climate Change  
IA-II (Coal Mining) DivisionIndira Paryavaran Bhawan,  
Jorbagh Road, N Delhi-3  
Dated: 23<sup>rd</sup> March, 2016

To,

The General Manager (Env/IMS/SD)  
**M/s Northern Coalfields Limited**  
Khadia Opencast Project  
Village Khadia, Tehsil Duddhi  
District **Sonebhadra** - 231 222 (UP)**Sub: Khadia Opencast Coal Mine Expansion Project from 10 MTPA to 14 MTPA in an area of 1640 ha located in District Sonebhadra (UP) and in Tehsil Singrauli, District Sidhi (MP) of M/s Northern Coalfields Limited - Environmental Clearance reg.**

Sir,

This is with reference to your letter No. NCL/Env/Khadia/Form-I/15/2210 dated 09.01.2015 and online proposal No. IA/UP/CMIN/19333/2007 on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance to Khadia Opencast Coal Mine Expansion Project from 10 MTPA to 14 MTPA in an area of 1640 ha (Latitude 24° 07' 26" N - 24° 08' 47" N and Longitude 82° 41' 40" E - 82° 44' 47" E) located in District Sonebhadra (UP) in Tehsil Singrauli in District Sidhi (Madhya Pradesh) of M/s Northern Coalfields Limited.

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects in its 29<sup>th</sup> meeting held on 15<sup>th</sup> -16<sup>th</sup> January, 2015, 37<sup>th</sup> meeting held on 11-12 June, 2015, 42<sup>nd</sup> meeting held on 31<sup>st</sup> August- 1<sup>st</sup> September, 2015, 44<sup>th</sup> meeting held on 8<sup>th</sup> -9<sup>th</sup> October, 2015 and 47<sup>th</sup> meeting held on 30<sup>th</sup> November - 1<sup>st</sup> December, 2015. The details of the project, as per the documents submitted by the Project Proponent (PP), and also as informed during the above said EAC meeting are reported to be as under: -

- (i) This is a case of expansion under clause 7 (ii) of the EIA Notification, 2006 with reference to O.M. No. J-15012/30/2004-IA.II (M) dated 30<sup>th</sup> May, 2014.
- (ii) Earlier EC was granted to the Khadia OCP vide letter No. J-11015/255/2006-IA.II (M) dated 10<sup>th</sup> April, 2007.
- (iii) The latitude and the longitude of the project are 24° 07' 26" N - 24° 08' 47" N and 82° 41' 40" E - 82° 44' 47" E respectively.
- (iv) Joint Venture: There is no Joint Venture.
- (v) Coal Linkage: Anpara STPS of UPRVUNL by Merry Go Round Rail system.
- (vi) The land usage of the project will be as follows: Pre-Mining:

| S. No. | LAND USE                        | Within ML Area (Ha) | Outside ML area (Ha) | Total  |
|--------|---------------------------------|---------------------|----------------------|--------|
| 1.     | Tenancy Land(Agricultural land) | 449.00              | NIL                  | 449.00 |
| 2.     | Forest Land                     | 844.00              | NIL                  | 844.00 |
| 3.     | Wasteland                       | -                   | NIL                  | -      |

Sth

|       |                          |         |     |         |
|-------|--------------------------|---------|-----|---------|
| 4.    | Grazing land             | -       | NIL | -       |
| 5.    | Surface water bodies     | -       | NIL | -       |
| 6.    | Settlements              | -       | NIL | -       |
| 7.    | Others (Government land) | 347.00  | NIL | 347.00  |
| Total |                          | 1640.00 | NIL | 1640.00 |

## Post-Mining:

| S.No. | Land use during Mining                                  | Land Use (ha)   |            |            |                                 | TOTAL   |
|-------|---|---|------------|------------|---------------------------------|---------|
|       |   | Plantation  | Water Body | Public Use | Others                          |         |
| 1     | External OB dump  | 258.00  | -          | -          | -                               | 258.00  |
| 2     | Top soil dump   | Top soil will be completely used in reclamation of dumps. |            |            |                                 |         |
| 3     | Excavation  | 808.00  | 39.00      | -          | 156.00 (Batter with plantation) | 1003.00 |
| 4     | Infrastructures (Workshop, CHP, Admn. Building & Roads) | 49.00   | -          | 81.00      | -                               | 130.00  |
| 5     | Residential & Green belt                                | -   | -          | 142.00     | -                               | 142.00  |
| 6     | Undisturbed area (Forest land in Safety Zone)           | 107.00  | -          | -          | -                               | 107.00  |
| Total |   | 1222.00   | 39.00      | 223.00     | 156.00                          | 1640.00 |

(vii) The total geological reserve is 335.95MT. The mineable reserve 296.85 MT, extractable reserve is 296.85 MT. The per cent of extraction would be 88.36%.

(viii) The coal grade is G-8. The stripping ratio is 4.23 M<sup>3</sup>/t (As per PR). The average Gradient is 2 to 4 degrees. There will be Three (03) seams with thickness ranging

| Coal Seam     | Thickness (m) |    |
|---------------|---------------|----|
|               | From          | To |
| Purewa Top    | 8             | 10 |
| Purewa Bottom | 8             | 13 |
| Turra         | 19            | 22 |

(ix) There is no change in the total estimated water requirement. The level of ground water ranges from 0.65 m to 14.45 m.

(x) The Method of mining would be opencast deploying dragline and shovel-dumper.

(xi) There is 2 external OB dump with Quantity of 254.33 Mbcm in an area of 258 ha with height of 90 meter above the surface level and 2 internal dump with Quantity of 1001.39 Mm<sup>3</sup> in an area of 808ha.

(xii) The final mine void would be in 39 Ha with depth of 30 to 40 m. and the Total quarry area is 1003 Ha. Backfilled quarry area of 808 Ha shall be reclaimed with plantation. A void of 39 ha with depth of 30 to 40 m which is proposed to be converted into a water body.

(xiii) The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.

- (xiv) The **life of mine** is 23/18 years (@ 10.0 MTY/@ 14.0 MTPA Balance life as on 1.04.2014).
- (xv) **Transportation:** Coal transportation in pit by rear dumpers, Surface to Siding by CHP to silo and loading at siding by CHP to rapid loading system (RLS) to rail wagons.
- (xvi) There is no **R & R** involved. There are no PAFs.
- (xvii) **Cost:** Total capital cost of the project is Rs. 2091.60 Crores. CSR Cost Rs. 2/- per tonne.
- (xviii) Cost Nil. Environmental Management Cost 26.98 Crores.
- (xix) **Water body:** There is no water body.
- (xx) **Approvals:** Board's approval obtained on 20.01.2004. Mine Plan / mine closure plan has been approved by NCL Board in the 197th Board meeting held on 28.07.2015.
- (xxi) **Wildlife issues:** There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- (xxii) **Forestry issues:** Total forest area involved 844 ha for mining. FC granted for complete land.

| Area (Ha) | Stage-1 FC issued vide letter no. & date     | Validity period of FC |
|-----------|--|-----------------------|
| 750.00    | Letter No. 8-298/87-FC dated: 30.07.1990     | Up to Mine Life       |
| 180.00    | Letter No. 8-85/2005-FC dated:<br>14.09.2010 | Up to Mine Life       |

- (xxiii) Total **afforestation** plan shall be implemented covering an area of 1271 ha at the end of mining Green Belt over an area of 49.00 ha. Density of tree plantation 2500 trees/ ha of plants.
- (xxiv) There are no **court cases/violation** pending with the project proponent.
- (xxv) **Public Hearing** on 6<sup>th</sup> April, 2005, at Samudaik Bhawan, Waidhan, Singrauli(M.P) & on 18<sup>th</sup> April, 2006 at Collectrate Sabhagar, Dist. Headquarters, Lodhi, Sonebhadra (U.P). The issues raised in the PH includes Electricity connection in all the houses of Ambedkar Nagar was requested by Shri M.Gupta, Member, Zila Panchayat; Issues regarding rehabilitation of land oustees was raised by few members; Point regarding drinking water was raised by some of the participants; Mr. Zuber Alam pointed out that medical facilities are not sufficient and the R&R oustees may be given medical facilities.
- (xxvi) Comparative Chart of deployment of men, machinery be submitted. Pollution load in the area to be indicated.

a) **Comparative chart of deployment of Men:**

| SI No. | Description | For 10 MTPA |                         | For 14 MTPA               |
|--------|-------------|-------------|-------------------------|---------------------------|
|        |             | As per PR   | Actual as on 31.01.2015 |                           |
| 1      | Manpower    | 2050        | 1433                    | No additional requirement |

b) **Comparative chart of deployment of Machinery**

| SI No | Machinery       | As per PR for 10 MTPA | For 14 MTPA               |
|-------|-----------------|-----------------------|---------------------------|
| 1     | Dragline        | 4                     | No additional requirement |
| 2     | Shovel          | 11                    | No additional requirement |
| 3     | Electric Drill  | 21                    | No additional requirement |
| 4     | Rear Dumper     | 52                    | No additional requirement |
| 5     | Dozer           | 17                    | No additional requirement |
| 6     | Grader          | 7                     | No additional requirement |
| 7     | Crane           | 6                     | No additional requirement |
| 8     | Water Sprinkler | 4                     | No additional requirement |

*SKD*

Actual machinery present as on date

| SI No | Machinery       | Actual at present |
|-------|-----------------|-------------------|
| 1     | Dragline        | 2                 |
| 2     | Shovel          | 12                |
| 3     | Electric Drill  | 14                |
| 4     | Rear Dumper     | 45                |
| 5     | Dozer           | 20                |
| 6     | Grader          | 5                 |
| 7     | Crane           | 11                |
| 8     | Water Sprinkler | 1                 |

- c) **Pollution load in the area:** The pollution load in the four stations within the core and buffer zones of Khadia OCP for two quarters has been monitored w.r.t. PM<sub>10</sub>, SO<sub>2</sub> & NO<sub>x</sub> and found to be within the permissible limits

(xxvii) The application for 180 ha forest land in the state of M.P. required for Khadia Expn. Project (10MTPA) was submitted on 09/03/2005. Stage –II clearance of the above land was granted on 14/09/2010. The possession of the land was handed over on 30.09.2013. Thus the delay in transferring of land resulted in subsequent delay in Khadia Expn. Project (10 MTPA). The procurement of dragline as per schedule (PR) is 2 Nos. up to 2013-14, 1 additional dragline in 2014-15 and 1 more in 2015-16. According to this the full capacity of 10 MTPA is to be reached in 2015-16/16-17. But due to shortage of coal the production is to be increased beyond 10 MTPA in 2015-16. Presently the working is being carried out in West section and in East section box cut is being opened, after that dragline will be deployed and production shall be increased substantially in 2015-16 as two sections will operate at the same time.

(xxviii) The only significant impact shall be on Ambient Air Quality (AAQ) which has been analyzed in detail and the total predicted concentration for different production capacities has been generated through AQIP computer model. It was noted that the AAQ level with 14 MTPA production is within the permissible limits.

(xxix) The order for installation of piezo-meters (drilling and construction) has been placed recently on 25.02.2015 for 6 nos. piezo-meters in Khadia OCP. The reasons for delay was mainly due to non-participation of adequate bidders for the tender. Some of the bidders did not qualify for the work.

(xxx) No coal will be transported by road for the increased capacity of 6 MTPA CHP is under construction and the same will be ready by 2017-18 when the increased production is scheduled to be achieved.

(xxxii) Final stage post mining reclamation plan has been prepared considering complete back filling of voids at the end of mining. Mine Closure plan has been revised accordingly. As informed by PP no handling of external OBD will be done and only progressive mined out OB will be filled in the mine void.

(xxxiii) Every year plantation is being done through U.P. Forest Department. The dump reclamation is a continuous process and the land is reclaimed immediately after the completion of the dump (external and internal). As per the suggestion of the committee the mine void at the end of mining shall be filled up with OB and totally reclaimed through bio-reclamation. The mine void shall be preferably filled up by OB from neighbouring adjacent mines.

(xxxiv) Mine Plan / mine closure plan has been approved by NCL Board in the 197th Board meeting held on 28.07.2015.

(xxxv) Details of year wise O.B. removal; Details of year wise Coal Production (Actual); Details of year wise Coal Production (Proposed); Details of year wise Coal Dispatch; Year wise plantation done so far & future programme been submitted.

(xxxvi) **Action plan for completion of CHP of 6 MTPA:** Construction work of CHP (6 MTY) has already been started in OCT 2014 with completion schedule of 24 Months and CHP will be operational in FY 2016-17 by OCT- 2016. Major equipment like apron feeders, plough feeders, rapid loading system etc. have been received at site. At present pace of construction work, CHP will be commissioned by October 2016.

**Detailed Action Plan for CHP construction as follows:**

| Major activities                   | Civil & Structural Works | Completion of Work (including equipment) | Status as on date (Nov 2015) |
|------------------------------------|--------------------------|--|------------------------------|
| Receiving pit & tunnel area        | 20 JUL 2016              | 30 SEP 2016                              | On time                      |
| Ground bunker                      | 14 SEP 2016              | 28 SEP 2016                              | Ahead of scheduled time      |
| Silo                               | 10 SEP 2016              | 21 SEP 2016                              | On time                      |
| Conveyor systems & transfer points | APR TO SEP 2016          | END OF SEP 2016                          | On time                      |

(xxxvi) **Submission of requirement for (road transport) 10% of production for e-auction** : Already dispatching coal through e-auction to small consumers at present, therefore, provision of dispatch of coal by road up to 10% of the EC capacity may be considered for meeting the demands of the small consumers of varied industries (Bricks, Foundries, Ceramics and other small industries). There is a government guideline for e-auction of 10% of the production vide MOC, GOI, OM No. 23011/4/2007-CPD Dtd. 18th October 2007 {Clause No. 10(v)}. Presently, part dispatch is also being done by Road to LANCO Power Plant, which may be allowed to be continued until the New CHP is made operational.

(xxxvii) **EC Compliance report: The compliance report of the**, Regional Office, MoEFCC at Lucknow vide letter no. No. IV/ENV/UP/mine-5/67/1992 dated 18.07.2013 was deliberated in the EAC meeting. The Committee has noted the Action taken for compliance by the project proponent.

4. The EAC, after detailed deliberations on the proposal in its 47<sup>th</sup> EAC meeting held on 30<sup>th</sup> November - 1<sup>st</sup> December, 2015 has recommended the project for grant of Environmental Clearance. The Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the **Khadia Opencast Coal Mine Expansion Project from 10 MTPA to 14 MTPA in an area of 1640 ha located in District Sonebhadra (UP), and in Tehsil Singrauli, District Sidhi (MP) of M/s Northern Coalfields Limited**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms and conditions and environmental safeguards as mentioned below:-

**A. Specific Conditions:**

- i. The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.
- ii. The validity of the EC is for the life of the Mine or as specified in the EIA Notification, 2006, whichever is earlier.
- iii. All the measures detailed in Mining Plan and Mine Closure Plan shall be implemented.
- iv. OB from Dhudhichua mine shall be used for for backfilling of mine void. At the mine closure 39 ha of void will be filled to near ground level.
- v. The CHP will be completed by October, 2016 which will meet the production of 10 MTPA plus some additional requirements.
- vi. The additional production should be met after the completion of the CHP.
- vii. Presently road transport of coal TO Anpara TPP will be converted into rail dispatch after the completion of the Khadia new CHP and the railway siding at Anpara TPP.
- viii. The proposal for road transport of the e-auction coal which is up to 10 per cent of the production is agreed
- ix. The production shall be within the same Mining Lease area.
- x. The OB shall be completely re-handled at the end of the mining.
- xi. Garland drains be provided.
- xii. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.
- xiii. The land after mining shall be brought back for agriculture purpose.

- xiv. Mine water should be treated for discharge into the lagoon. The quality of lagoon water shall be regularly monitored and mitigation measures taken.
- xv. The CSR cost should be as per the prevalent policy of Ministry of Coal or the Coal India Limited.
- xvi. Everybody in the core area should be provided with mask for protection against fugitive dust emissions.
- xvii. Dust mask to be provided to everyone working in the mining area.
- xviii. The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.
- xix. People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.
- xx. The mining area should be grounded by green belt having thick closed thick canopy of the tree cover.
- xxi. The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.
- xxii. There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.
- xxiii. OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forests & Climate Change and its concerned Regional office on yearly basis.
- xxiv. Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.
- xxv. Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.
- xxvi. Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- xxvii. Drills shall be wet operated.
- xxviii. The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads,
- xxix. Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.
- xxx. A Progressive afforestation plan shall be implemented at the end of mining, which includes reclaimed External OB dump area (**258 ha**), Internal OB dump area (**808 ha**) and Green belt (**49 ha**) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around **2500** plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.
- xxxi. An estimated total **1255.72 Mm<sup>3</sup>** of OB will be generated during the entire life of the mine. Out of which **254.33 Mm<sup>3</sup>** of OB will be dumped in two external OB Dumps an earmarked area covering **258 ha** of land. **1001.72 Mm<sup>3</sup>** of will be two internal OB dump in covering an area of **808 ha**. The maximum height of external OB dump will not exceed **90 m**. The maximum slope of the dump shall not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self- sustaining and compliance status shall be submitted to MOEFCC and its Regional Office on yearly basis.
- xxxii. The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.
- xxxiii. Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.
- xxxiv. The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.


- xxxv. No groundwater shall be used for mining operations.
- xxxvi. Of the total quarry area of **1003 ha**, the backfilled quarry area of **808 ha** shall be reclaimed with plantation and a void of **39 ha** which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilised with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- xxxvii. Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment, Forests & Climate Change and to the Central Pollution Control Board quarterly within one month of monitoring.
- xxxviii. The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- xxxix. Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.
- xl. Besides carrying out regular periodic health check-up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, through a specialised agency /institution within the District/State and the results reported to this Ministry and to DGMS.
- xli. Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher.
- xlii. For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEFCC and its concerned Regional office
- xliii. A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forests & Climate Change within 6 months of grant of Environmental Clearance.
- xliv. The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.
- xl. Corporate Environment Responsibility:
- The Company shall have a well laid down Environment Policy approved by the Board of Directors.
  - The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
  - The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
  - To have proper checks and balances, the company shall have a well laid down 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.

## B. General Conditions:

- No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forest & Climate Change.
- No change in the calendar plan of production for quantum of mineral coal shall be made.
- Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> monitoring. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.
- Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned


- Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- v. Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
  - vi. Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
  - vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
  - viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.
  - ix. Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.
  - x. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.
  - xi. A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
  - xii. The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
  - xiii. The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the Ministry of Environment, Forests & Climate Change at <http://envfor.nic.in>.
  - xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.
  - xv. A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.
  - xvi. The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
  - xvii. The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office s of CPCB and the SPCB.
  - xviii. The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
  - xix. The Environmental statement for each financial year ending 31 March in For -V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF&CC by e-mail.

5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, presentation to the EAC and also the issues raised during Public Hearing.
6. The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
7. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.
8. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.
10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
11. This EC is in supersession to the earlier EC granted to the project vide letter No.J-11015/255/2006-IA.II (M) dated 10<sup>th</sup> April, 2007 for 10 MTPA in an area of 1640 ha.

  
 23/3/2016  
 (S. K. Srivastava)  
 Scientist E

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office, B-1/272, Sector K, Aliganj, **Lucknow** - 226020
3. The Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, **Bhopal** - 462016
4. The Secretary, Environment Department, Government of Uttar Pradesh, Secretariat, Lucknow
5. The Secretary, Department of Environment & Forests, Government of MP, Secretariat, Bhopal (MP)
6. The Member Secretary, Uttar Pradesh State Pollution Control Board, Building. No. TC-12V, VibhutiKhand, Gomti Nagar, Lucknow-226 010, Uttar Pradesh
7. The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462016
8. The Member Secretary, CPCB, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
9. The Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
10. District Collector, Sonbhadra, Government of Uttar Pradesh.
11. The District Collector, Sidhi (Madhya Pradesh)
12. Monitoring File    13. Guard File    14. Record File    15. Notice Board

  
 23/3/2016  
 (S. K. Srivastava)  
 Scientist E

ENVIRONMENTAL  
CLEARANCE

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Impact Assessment Division)**

To,

The General Manager  
Northern Coalfields Ltd. (NCL)

General Manager Khadia ,P.O. Shaktinagar, Distt.:Sonebhadra, Uttar  
Pradesh PIN 231222,,Sonbhadra,Uttar Pradesh-231222

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity  
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)  
in respect of project submitted to the Ministry vide proposal number  
IA/UP/CMIN/271949/2022 dated 09 Jul 2022. The particulars of the environmental  
clearance granted to the project are as below.

- |   |                                |
|---|--------------------------------|
| 1. <b>EC Identification No.</b>                       | <b>EC22A042UP184193</b>        |
| 2. <b>File No.</b>                                    | J-11015/255/2006-IA-II(M)      |
| 3. <b>Project Type</b>                                | Expansion7                     |
| 4. <b>Category</b>                                    | A                              |
| 5. <b>Project/Activity including<br/>Schedule No.</b> | 1(a) Mining of minerals        |
| 6. <b>Name of Project</b>                             | Khadia Opencast Project        |
| 7. <b>Name of Company/Organization</b>                | Northern Coalfields Ltd. (NCL) |
| 8. <b>Location of Project</b>                         | Uttar Pradesh                  |
| 9. <b>TOR Date</b>                                    | N/A                            |

The project details along with terms and conditions are appended herewith from page  
no 2 onwards.

Date: 27/07/2022

(e-signed)  
Lalit Bokolia  
Scientist F  
IA - (Coal Mining sector)

*Note: A valid environmental clearance shall be one that has EC identification  
number & E-Sign generated from PARIVESH.Please quote identification  
number in all future correspondence.*

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and Virtuous Environment Single-Window Hub)*



**F. No. J-11015/255/2006-IA-II(M).**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

\*\*\*\*\*

2<sup>nd</sup> Floor Vayu Wing,  
Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi – 3  
Email: lk.bokolia@nic.in Tel: 011-20819417

**Dated: 27<sup>th</sup> July, 2022**

**To**

The General Manager (Khadia Project),  
M/s Northern Coalfields Ltd,  
P.O. Shaktinagar, Distt: Sonbhadra,  
Uttar Pradesh PIN 231222  
Email: [gmenv@ncl.gov.in](mailto:gmenv@ncl.gov.in); [gmenv\\_ncl@coalindia.in](mailto:gmenv_ncl@coalindia.in), [cgm.khd@gmail.com](mailto:cgm.khd@gmail.com)

**Sub: Expansion of Khadia opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd, located in the village Khadia, Tehsil Dudhi, District Sonbhadra (UP) & village Dhudhichua, Tehsil Singrauli, District Singrauli (M.P.)- Environmental Clearance under OM vide no. F. No. IA3-22/10/2022-IA.III 07.05.2022- [Availing total 50% relaxation of OM dealing with exemption of public hearing under clause 7 (ii) of EIA notification].**

**Sir,**

This has reference to your online proposal No. IA/UP/CMIN/271949/2022 dated 11<sup>th</sup> July, 2022 submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions with MoEF & CC's Office Memorandum vide no. F. No. IA3-22/10/2022-IA.III (E 177258) dated 07.05.2022 and as per EIA Notification, 2006) of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 for Expansion of Khadia opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd, located in the village Khadia, Tehsil Dudhi, District Sonbhadra (UP) & village Dhudhichua, Tehsil Singrauli, District Singrauli (M.P.).

2. The proposal was granted EC for production capacity of 10 MTPA in ML area of 1640 Ha dated 10.04.2007. Further EC was granted for expansion under Clause 7 (ii) of EIA notification, 2006 on 23.03.2016 as per the O. M. dated 30.05.2014 for total 40 % expansion i.e. 14 MTPA production capacity in ML area of 1640 Ha. Presently the proposal is considered by the Ministry in view of the exigency, as per the provisions of O.M. F. No. IA3-22/10/2022-IA.III dated 07.05.2022 and abeyance vide MoEF&CC's OM dated 28.01.2022 on OM no. 22-23/2018-IA.III(Pt.) dated 31.10.2019 on mechanism for consideration of proposal of critically/ severally polluted area and abeyance on above OM has been lifted vide OM dated 05.07.2022

3. Based on the submission of Project Proponent, Ministry hereby grants approval to Expansion of Khadia opencast coal mining project for increase in production capacity from

Page 1 of 3

14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by Northern Coalfields Ltd, located in the village Khadia, Tehsil Dudhi, District Sonbhadra (UP) & village Dhudhichua, Tehsil Singrauli, District Singrauli (M.P.) under the provisions of OM vide no. F. No. IA3-22/10/2022-IA.III 07.05.2022, under the Environment Impact Assessment (EIA) Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions for environmental safeguards as stated below:-

- i. PP shall submit Certified Compliance Report of the EC vide No. F. No. J-11015/255/2006-IA-II(M) dated 23/03/2016 granted for total 40% expansion, along with EIA/EMP report, prepared based on standard ToRs for the additional capacity of 10% on PARIVESH portal within six months of enhancement of production beyond 40%.
- ii. In view of above (i), Ministry shall ascertain the adequacy of the proposed environmental safeguards and stipulate necessary conditions, if required, which shall be monitored as a part of the EC compliance monitoring.
- iii. PP shall obtain necessary prior consent for enhanced capacity from State Pollution Control Board under Air and Water Act.
- iv. Environmental quality parameters arising out of proposed expansion shall be within the prescribed norms and the same shall be maintained as per prescribed norms.
- v. Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent".
- vi. All other terms and conditions as prescribed in Ministry's letter dated 10.04.2007, and 23.03.2016 shall remain the same and need to be complied by PP.

Additional Specific conditions as the area falls under Severely Polluted Areas (SPAs)

- (i) Transportation of materials by rail/conveyor belt shall be implemented
- (ii) Encourage use of cleaner fuels for trucks, If the roads required to be widened upto nearest railway siding, the same be constructed to avoid traffic congestion.
- (iii) Increase green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.
- (iv) Greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc. shall be implemented.
- (v) Assessment of carrying capacity of mine & road transportation shall be done as per the State Plan/instructions.
- (vi) Reuse/recycle of treated wastewater shall be implemented as feasible with latest technology. Zero liquid discharge concept may be adopted.
- (vii) PP to install Continuous monitoring station for ambient air quality and also continuous effluent quality in ETP shall be installed. Data so generated shall be linked with respective SPCB and CPCB websites.

- (viii) A detailed water harvesting plan may be prepared by the project proponent for water augmentation and submitted to Regional Office of MoEF&CC.
- (ix) The project proponent shall install STP for generated domestic wastewater and should meet for discharge standards.
- (x) More stringent norms for management of hazardous waste like oil container, ETP sludge etc shall be adopted. The waste generated should be preferably utilized in co-processing.
- (xi) Monitoring of compliance of EC conditions may be submitted with third party audit every year.
- (xii) Fund allocation for Corporate Environment Responsibility (CER) which is atleast 1.5 times as per OM of 1st May, 2018 may now be considered as 1.5 times of fund allocated on commitment made during public consultation process for incorporating in EIA-EMP for deliberation of EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

This issues with the approval of the competent Authority



**(Lalit Bokolia)**  
**Director**

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Chief Conservator of Forests (Central), Ministry of Environment and Forests, Regional Office, B-1/272, Sector K, Aliganj, Lucknow
3. The APCCF, MOEF&CC, Regional Office(EZ), E-5 Arera Colony, Bhopal - 462 016
4. The Secretary, Environment Department, Government of U.P., Secretariat, Lucknow
5. The Secretary, Department of Environment & Forests, Government of Madhya Pradesh, Secretariat, Bhopal
6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
7. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
8. The Member Seretary, Uttar Pradesh State Pollution Control Board, Building No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow (U.P.)
9. The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462 016
10. The District Collector, Sonbhadra, Government of Uttar Pradesh
11. The District Collector, Singrauli, Government of Madhya Pradesh
12. Monitoring File/Guard File/Record File
13. PARIVESH Portal



**(Lalit Bokolia)**

Signature Not Verified  
Digitally signed by Lalit Bokolia  
Scientist  
Date: 7/27/2022 3:35:34 PM

ENVIRONMENTAL  
CLEARANCE

**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Impact Assessment Division)**

To,

The General Manager  
Northern Coalfields Ltd. (NCL)

General Manager Khadia ,P.O. Shaktinagar, Distt.:Sonebhadra, Uttar Pradesh PIN 231222,,Sonbhadra,Uttar Pradesh-231222

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/UP/CMIN/413536/2023 dated 08 Jun 2023. The particulars of the environmental clearance granted to the project are as below.

|   |                                |
|---|--------------------------------|
| 1. <b>EC Identification No.</b>                   | <b>EC24A001UP129085</b>        |
| 2. <b>File No.</b>                                | J-11015/255/2006-IA-II(M)      |
| 3. <b>Project Type</b>                            | Expansion                      |
| 4. <b>Category</b>                                | A                              |
| 5. <b>Project/Activity including Schedule No.</b> | 1(a) Mining of minerals        |
| 6. <b>Name of Project</b>                         | Khadia Opencast Project        |
| 7. <b>Name of Company/Organization</b>            | Northern Coalfields Ltd. (NCL) |
| 8. <b>Location of Project</b>                     | Uttar Pradesh                  |
| 9. <b>TOR Date</b>                                | N/A                            |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 07/02/2024

(e-signed)  
Amit Vashishtha  
Scientist F  
IA - (Coal Mining sector)

*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

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**File No. J-11015/255/2006-IA-II(M)**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

\*\*\*\*\*

Indira Paryavaran Bhawan,  
Jal Wing 3<sup>rd</sup> Floor  
Jorbagh Road, New Delhi – 110003  
Email: [amit.vashishtha@nic.in](mailto:amit.vashishtha@nic.in)  
Tel: 011-20819306

**Dated:** *Jm* February, 2024

**To,**

The General Manager,  
M/s Northern Coalfields Limited  
Village- Khadia Area P.O. Shaktinagar,  
District -Sonebhadra-231222 (Uttar Pradesh)  
**Email:** [cgm.khd@gmail.com](mailto:cgm.khd@gmail.com)

**Sub: Expansion of Khadia Opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd. located in the village Khadia, Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) & village Dhudhichua, Tehsil Singrauli, District Singrauli (Madhya Pradesh) - Environmental Clearance under OM vide F. No. IA3-22/10/2022-IA.III 07.05.2022 - [Availing total 50% relaxation of OM dealing with exemption of public hearing under clause 7 (ii) of EIA notification] – reg.**

Sir,

This has reference to your online proposal No. IA/UP/CMIN/413536/2023 dated 8<sup>th</sup> June, 2023 for grant of Environmental Clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance to the Expansion of Khadia Opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd. located in the village Khadia, Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) & village Dhudhichua, Tehsil Singrauli, District Singrauli (Madhya Pradesh).

The project/activity is covered under category 'A' of item1(a) 'Mining of Minerals' the Schedule to the EIA Notification, 2006

3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its 46<sup>th</sup> meeting held during 26 - 27 June, 2023, 48<sup>th</sup> meeting held on 25-28<sup>th</sup> August, 2023 and 3<sup>rd</sup> meeting held during 16-17 November, 2023 through Video Conferencing/Hybrid. The details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meetings, are given as under:

- (i) The project area is covered under Survey of India Topo Sheet No 63-L /12 and is bounded by the geographical coordinates ranging from Latitude 24°06'50.48" North to 24°08'59.22" North and Longitude 82°41'20.91" East to 82°44'27.55" East.
- (ii) Coal linkage of the project is for Anpara TPS (1630 MW) of UPRVUNL and Lanco Anpara TPS (1200MW) and it will also serve as Basket Linkage mine to meet the overall demand of power grade coal on NCL.
- (iii) Joint venture cartel has NOT been formed.
- (iv) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13th January, 2010 has imposed moratorium on grant of environment clearance.
- (v) Employment generation 2050 nos. (As per Mining Plan 15 MTPA) persons will be provided from the project.
- (vi) The project is reported to be beneficial in terms of (i) Environmental: Post mining enhancement of green cover; (ii) Economic: Increase in employment potential and contribution to the exchequer of the adjoining area; (iii) Social: Improvement in social infrastructure of the adjoining area.
- (vii) Earlier, the environment clearance to the project was obtained under EIA Notification, 2006 vide Ministry's F. No J-11015/255/2006-IA.II (M) dated: 23.03.2016 for 14.00 MTPA in mine lease area of 1640 Ha. Subsequently, environment clearance to the project has also been obtained under EIA Notification, 2006 vide Ministry's F. No J-11015/255/2006-IA.II (M) dated: 27.07.2022 for 15.00 MTPA in mine lease area of 1640 Ha
- (viii) Terms of Reference granted on – (for EC proposals)- Standard ToR
- (ix) Total mining lease area as per block allotment is 1640 Ha. Mining Plan (Including Mine Closure Plan) has been approved by the NCL Board in 276<sup>th</sup> meeting on 30.05.2022.
- (x) The land usage pattern of the project is as follows:

**Pre-mining land use details (Area in Ha)**

| S. No.       | LAND USE                              | Within ML Area (Ha) | Outside ML area (Ha) | Total (Ha) |
|--------------|---------------------------------------|---------------------|----------------------|------------|
| 1.           | Agricultural land(Tenancy Land)       | 449 Ha              | Nil                  | 449        |
| 2.           | Forest Land                           | 844 Ha              | Nil                  | 844        |
| 3.           | Wasteland                             | 0                   | Nil                  | 0          |
| 4.           | Grazing land                          | 0                   | Nil                  | 0          |
| 5.           | Surface water bodies                  | 0                   | Nil                  | 0          |
| 6.           | Settlements                           | 0                   | Nil                  | 0          |
| 7.           | Others (Specify)<br>• Government land | 347 Ha              | Nil                  | 347        |
| <b>Total</b> |                                       | 1640 Ha             | Nil                  | 1640       |

**Post- Mining:**

| S. No. | Land use during Mining | Land Use (ha) |            |            |             |       |
|--------|------------------------|---------------|------------|------------|-------------|-------|
|        |                        | Plantation    | Water Body | Public Use | Undisturbed | TOTAL |
|        |                        |               |            |            |             |       |

|       |   |   |       |     |   |      |
|-------|---|---|-------|-----|---|------|
| 1     | External OB dump                        | 258   | 0     | 0   | 0 | 258  |
| 2     | Top soil dump                           | Top soil will be completely used in reclamation of dumps. |       |     |   |      |
| 3     | Excavation                              | 964   | 39    | 0   | 0 | 1003 |
| 4     | Roads and Infrastructure                | 49  | 0     | 81  | 0 | 130  |
| 5     | Residential area and Green Belt         | 0   | 0     | 142 | 0 | 142  |
| 6     | Undisturbed Area (Safety Zone & Others) | 107   | 0     | 0   | 0 | 107  |
| Total |   | 1378  | 39.00 | 223 | 0 | 1640 |

- (xi) Total geological reserve reported in the mine lease area 335.95 MT (since inception) with 296.85 MT (since inception) mineable reserve. Out of total mineable reserve of 296.85, 144.54 are available for extraction as on 01.04.2022. Percent of extraction is 88.36 % to the geological reserve.
- (xii) Three number of seams (namely Purewa Top, Purewa Bottom, Turra) with thickness ranging from 7.00 m to 22.93 m are workable. Grade of coal is G-8 (Average Grade), stripping ratio 4.61m<sup>3</sup>/t (balance as on 31.03.2022), while gradient is 2 to 4 degree.
- (xiii) Method of mining operations envisages by 'combined mining system deploying dragline and shovel dumper combination and Surface Miner' method
- (xiv) Life of mine is 11 years from 31.03.2022.
- (xv) The project has 2 number of external OB dumps in an area of 258 ha with 90 m height and 209.977 Mm<sup>3</sup> of OB filled till 31.03.2023, 2 number of internal OB dumps in an area of 964 ha with 434.494 Mm<sup>3</sup> of OB filled till 31.03.2023 and additional 611.564 Mm<sup>3</sup> of OB is envisaged in the project.
- (xvi) Total quarry area is 1003 ha out of which backfilling will be done in 964 ha while final mine void will be created in an area of 39 ha with a depth of 40m. Backfilled quarry area of 964 ha shall be reclaimed with plantation. Final mine void will be converted into a water body.
- (xvii) Transportation of coal has been proposed by dumpers in mine pit head, from surface to SILO / siding by Closed Conveyor Belt System and from SILO/ siding by MGR/Rail through automatic RLS (Rapid Loading System). Also, provision of dispatch by road may be considered for meeting the demands of small consumers of various industries.
- (xviii) Reclamation Plan in an area of 1417 ha, comprising of 258 ha of external dump, 964 ha of excavated area and 61 ha of green belt, 95 ha land of built-up area will be planted, 39 Ha of hydro reclamation. In addition to this, 107 Ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xix) 844 ha of forest land has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 664 ha of forest land for non-forestry purposes has been obtained vide F No. 8- 298/87-FC dated 30.07.1990 in UP state and 180 Ha of Forest Clearance obtained vide No.8-85/2005-FC dt. 14/09/2010 for 180 ha in MP State.
- (xx) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10 km boundary of the project

- (xxi) The ground water level has been reported to be varying between 0.85 m to 5.65 m during pre-monsoon and between 0.35 m to 4.65 m during post-monsoon (from 2011 to 2021). Total water requirement for the project is 2100 KLD for industrial use, 675 KLD for Fire Fighting and 1300 KLD for Domestic purpose.
- (xxii) Application for obtaining the approval of the Central Ground Water Authority for ground water clearance for Khadia OCP, has been submitted on 29.03.2020.
- (xxiii) Public Hearing for the project of 10.00 MTPA capacity in an area of 1640 Ha was conducted on 06.04.2005 and 18.04.2006 at Samudayik Bhawan, Waidhan, Singrauli (under the chairmanship of Collector, Sidhi District) and Collectorate Auditorium, Sonebhadra respectively (under the chairmanship of Collector, Sonebhadra). Major issues raised in the public hearing include community development works and infrastructure etc. Appropriate action to address the issue raised in the public hearing have been taken.
- (xxiv) Commitment made by project proponent to address the public hearing concerns in lieu of Corporate Environment Responsibility (CER) to be mentioned in the following table.

| S. No.       | Particulars  | Location           | Year-1 (in Lakhs) | Year-2 (in Lakhs) | Total (in Lakhs) |
|--------------|--|--------------------|-------------------|-------------------|------------------|
| 1            | Sanitation (cleaning of public road)                 | Nearby public road | 50                | 50                | 100              |
| 2            | Roads (Control of road dust due to public transport) | Nearby public road | 100               | 100               | 200              |
| 3            | Plantation in community areas                        | Nearby population  | 1                 | 1                 | 2                |
| 4            | Dust control measures at nearby villages             | Nearby villages    | --                | 22                | 22               |
| <b>Total</b> |  |                    | 151               | 173               | 324              |

- (xxv) Consent to Operate for the existing capacity was obtained from the MPPCB on 28.12.2022 and is valid till 31.12.2023 and from UPPCB on 16.12.2022 and is valid till 31.12.2024.
- (xxvi) No River/nalla is flowing near boundary of lease.
- (xxvii) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to MPPCB, UPPCB, and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.
- (xxviii) No court cases, violation cases are pending against the project of the PP.
- (xxix) The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 1991-92 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operation. The Coal Production, realized from the project, from 1993-94 onwards, is given below.
- (xxx) The project involves nil project affected families in expansion.
- (xxxii) Total cost of the project is Rs. 2091.60 Crore. Cost of production is Rs. 1032.81 /- per tonne, CSR cost is as per CIL CSR Policy, 2021, the fund for the CSR should be allocated

based on 2% of the average net profit of the company for the three immediate preceding financial years or Rs. 2/- per tonne of coal production of previous year, R&R cost is Nil. Environment Management Cost is Rs. 2758.64 Lakhs.

4. In the instant project, earlier Environmental Clearance for expansion of Khadia Opencast coal mining project was granted in advance under OM vide no. F. No. [A3-22/10/2022-IA.III dated 07.05.2022- [Availed total 50% relaxation of OM under clause 7 (ii) of EIA notification] in view of shortage of coal. The EC was granted subject to certain condition such as submission of EIA-EMP report within six months for appraisal of EAC along with other statutory requirement mentioned therein.

5. The Expert Appraisal Committee in its 3<sup>rd</sup> EAC Meeting during 16-17 November 2023 through Video Conferencing/Hybrid has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance(EC) to **Expansion of Khadia Opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd. located in the village Khadia, Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) & village Dhudhichua, Tehsil Singrauli, District Singrauli (Madhya Pradesh), under OM vide F. No. IA3-22/10/2022-IA.III 07.05.2022 - [Availing total 50% relaxation of OM dealing with exemption of public hearing under clause 7 (ii) of EIA notification]** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the Ministry as under :-

**Specific Conditions:**

- i. PP shall commission the additional Rapid Loading System (Silo) of 4.0 MTPA before December, 2024 in addition to the existing coal transportation facility (with 2 nos. of CHPs with Silo loading facility of 10.0 MTPA) having Merry Go-Round (MGR) arrangement.
- ii. PP shall use the mechanized system for 13.5 MTPA (i.e. ~90% of 15MTPA) and for the rest 1.5 MTPA (i.e. ~10 % of 15MTPA) by road through automatic truck loading system linked with SILO arrangement. Accordingly, SPCB shall issue the CTO.
- iii. PP shall develop environmental lab with adequate environmental monitoring instrument/equipment and deploy qualified manpower in its mine office instead of using laboratory of consultant for regular monitoring and analysis activity shall be done by December, 2023.
- iv. PP shall protect/preserve 10 ha Sal nursery with capacity of approximately 1.0 lakh nos. Sal saplings and yearly minimum 10,000 saplings to be distributed among near villagers for afforestation purpose. The planted trees shall be geotagged and its status to be submitted to Ministry's Regional Office with six monthly report.
- v. PP shall obtain No objection certificate from Central Ground water authority for expanded capacity.
- vi. PP to implement extra mitigation measures (such as installation of fog cannon, wheel washing facility, implementation of electric vehicle and others.) in order to reduce the

- pollution inside/outside the ML area in order to meet ambient air quality standards and a progressive report to be submitted to IRO, MoEF&CC.
- vii. PP needs to submit the audited figures against the expenditure and activities to be conducted for environment mitigation measures and addressing the issues of public hearing through dedicated monitoring mechanism. The maintenance of all activities raised in earlier PH, shall be covered through recurring cost of Public Hearing, which will be part of CSR budget.
  - viii. PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System."
  - ix. PP shall submit status of audited report for progressive mine closure after commissioning of mine till date to IRO, MoEF&CC.
  - x. PP shall start reclamation of the mine with combination of top soil and Fly ash with the development of grazing facility and other activities to be considered from the progressive mine closure plan.
  - xi. PP shall fulfill the water requirement for agricultural purpose by creating artificial ponds and shall fulfil the drinking water requirement after treatment through dedicated well or alternate sources for villagers.
  - xii. Water storage ponds shall be constructed of appropriate depth in nearby village in collaboration with Gram Panchayat.
  - xiii. PP shall provide Quarterly health check-up with free medical facilities for the local villager's surrounding to the 10 km buffer area along with the ambulance facilities.
  - xiv. PP shall establish a technical training institute in the area to train the local youth for better employment. A report shall be prepared & submitted upon the status of the training session already conducted in order to provide livelihood and skill development to near-by villagers to make them employable.
  - xv. PP needs to submit the compliance of SoP issued by CPCB regarding dumping of mine void with fly ash.
  - xvi. The project proponent shall include development of solar parks, eco-friendly-parks, fish farming pond, picnic spot and sports compound in its Mine Closure Report. Further if possible, maximum possible area of quarry shall be brought upto original ground level and handover the land to Project affected Families.
  - xvii. Proper garland drain and retaining wall should be made (if required) and same should be revived from time to time.
  - xviii. PP to complete the tree plantation particularly fruit bearing tree along the village road and safety zone and submit its status to Ministry's Regional Office. The plantation shall also be planted along the Mine boundary and Mine pit. A detailed report with GIS images of every six months subsequently be submitted in every six monthly report to justify the adequate tree plantation.
  - xix. PP shall increase number of fixed type sprinkling system (near to haul road, stockyard, transportation route etc.) across the mine lease area in order to arrest the dust coming out from the mining activities.

- xx. PP shall install 100 m jet spray length in order to arrest the heavy air pollution on the roads and other dust generating points. More number of Fog cannons, Road sweeper and Mobile water sprinklers to be used on road.
- xxi. PP shall construct 25-sitting digital library in each village including the daily newspaper facility
- xxii. PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be submitted to IRO, MoEF&CC:-
- xxiii. The status of mine closure activities must be included in every six months' compliance report submitted to the state pollution control board and IRO.
- xxiv. PP to maintain the topped haul road properly to minimized the dust emission. PP to also develop pucca roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.
- xxv. PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year.
- xxvi. PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
- xxvii. PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms.
- xxviii. PP shall explore atleast 20% of overall fleet of dumpers/trucks/other vehicles as electrical or CNG/LNG based for transportation of coal/OB etc.
- xxix. PP shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the Fly Ash Utilization Notification, 2021.
- xxx. All the other terms and conditions of earlier EC dated 10.04.2007 (with Public Hearing), 23.03.2016, and 27.07.2022 shall also be complied.

**5.1** The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:

**(a) Statutory compliance**

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).

- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

**(b) Air quality monitoring and preservation**

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.

(vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

**(c) Water quality monitoring and preservation**

(i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.

(ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-1A.11 (M) dated 27<sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

(iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

(iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.

(v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

(vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

(vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).

(viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.

(ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

(x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

(xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A rivarine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

**(d) Noise and Vibration monitoring and prevention**

(i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

(ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

(iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

**(e) Mining Plan**

(i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.

(ii) Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).

(iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.

(iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

**(f) Land reclamation**

(i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

(ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.

(iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the “during mining”/”post mining” land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

(iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

(v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

(vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

**(g) Green Belt**

(i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.

(ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

**(h) Public hearing and Human health issues**

(i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.

(ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

(iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

(iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.

(v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

**(i) Corporate Environment Responsibility**

(i) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.

(ii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

(iii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The

year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(iv) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

**(j) Miscellaneous**

(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

(iv) The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

(v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

(vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

(vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

(viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.

(ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

(x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

(xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.

(xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

(xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

(xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

(xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

(xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

6. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.

7. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

8. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

9. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2<sup>nd</sup> August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.

10. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.

11. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.

This issues with the approval of the competent Authority

  
(Amit Vashishtha)  
Scientist 'E'

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Additional PCCF (Central), Regional office (EZ), E-5 Area Colony, Bhopal – 462016
3. The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Area Colony, Bhopal -462 016
4. The Chairman, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
6. The District Collector Singrauli, Government of Madhya Pradesh and District Collector Sonbhadra Government of Uttar Pradesh.
7. Monitoring File
8. PARIVESH

  
(Amit Vashishtha)  
Scientist 'E'

Signature Not Verified

Digitally signed by: Amit Vashishtha  
Designation: Scientist F  
Date and Time: 27/02/2024 11:02:35  
AM

IA-J-11014/112/2022-IA-I  
Government of India  
Ministry of Environment, Forest & Climate Change  
Impact Assessment Division  
\*\*\*

Indira Paryavaran Bhavan,  
Jor Bagh Road, New Delhi-110 003  
Dated: 25<sup>th</sup> November, 2022

**Office Memorandum**

**Sub:- Standard Operating Procedure (SOP) for Post Environmental Clearance Monitoring and Compliance of the project -reg.**

**Background**

The Ministry has established 19 Integrated Regional Office (IROs) vide Notification No. 1-5/2013-ROHQ dated 13<sup>th</sup> August, 2020 with a view to achieving mandated outcomes related to Monitoring and Compliance of the project in an improved, timely and effective manner.

2. As far as monitoring and compliance of EC conditions are concerned, as per para 10 of the EIA Notification, 2006, it is mandatory for the project proponent to submit half-yearly compliance reports in respect of the stipulated EC conditions to the Ministry and its Integrated Regional Offices (IROs).

**The prescribed SOP wrt the Monitoring & Compliance is as given below:**

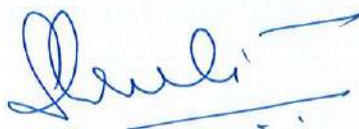
**1. IROs undertake inspection of the unit, with respect to the following scenarios:**

- i. IRO identifies ambiguity in half-yearly compliance reports with respect to the stipulated EC conditions submitted by Project Proponent (PP).
- ii. PP request IRO for issuance of Certified Compliance Report (CCR) in order to apply for expansion of the project under EIA, Notification 2006.
- iii. Complaint received against the project.
- iv. Direction from the Ministry based on PMO/VIP/PG/RTI etc. references.
- v. Random Inspection of projects.
- vi. Direction from Hon'ble court in various Court Matter.

2. Based on the observations during Monitoring IRO seeks Clarification/Action Taken Report (ATR) to the PP and submit Monitoring Report along with the clarification letter to the Ministry.

3. If PP fails to respond to it a reminder letter is sent by IA-Monitoring Cell allowing PP to submit ATR in 15 days.

4. **Action on the Monitoring Report by the Monitoring Cell:** Monitoring Cell of Ministry analyse the monitoring report submitted by IRO. Based on the observed Major and Minor partial/non-compliances clarification/ATR, if necessary, is sought from Project Proponent with direction to submit the response within a period of Thirty (30) days. If PP fails to submit the response of clarification/ATR letter within the time line period, a reminder letter as warning issued to the PP.



5. The response submitted by PP is examined in the Ministry and the Action taken report submitted by PP is sent to IRO for further verification. Based on IRO's verification report following actions are contemplated:

- i. If no satisfactory action has been taken by the PP and EC conditions are yet to be complied Ministry may issue Show-Cause Notice under the Section 5 and other provisions which may include Section 15 and 19 of the Environment (protection) Act, 1986.
- ii. If it is observed that the non-compliances are not rectified, Ministry provides an opportunity to PP for clarification in personal hearing under the chairmanship of officer not below the rank of Joint Secretary. Based on the outcome of the personal hearing if necessary, direction for Compensation/Suspension of EC may be issued.
- iii. If it is observed that PP has taken credible action to comply with the condition and the action is expected to be completed with some additional time, Ministry grant additional time in which actions are expected to be completed by PP to fully comply with the conditions mentioned in the EC and submit the compliance report duly verified by concerned IRO to the Ministry.
- iv. If it is observed that PP has now complied with all the conditions and the same has been confirmed in the verification report, Ministry issues Action Closure Letter (ACL) to the PP with direction to continuously submit six monthly compliance report on time.
- v. If it is observed that PP has violated the provisions of EIA Notification, 2006 and attracts the provisions of SOP dated 07.07.2022, Monitoring Cell intimates the concerned sector for taking appropriate action as deem fit.

**6. Action after issuance of Show Cause Notice:**


- i. Monitoring Cell of the Ministry prescribes a time line of Fifteen (15) days or Thirty (30) days for submission of reply of SCN based on the gravity of non-compliances. If PP fails to submit the response of SCN within the prescribed time period, if necessary, a warning letter may be issued.
- ii. The response to SCN submitted by PP is examined in the Ministry and if found necessary the reply submitted by PP is sent to IRO for further verification. Based on IRO's verification report following actions are contemplated:
  - a) If it is observed that PP has now complied with all the conditions and the same has been confirmed in the verification report, Ministry issues ACL to the PP with direction to continuously submit six monthly compliance report on time.
  - b) If it is observed that the non-compliances are not rectifiable, Ministry provides an opportunity to PP for clarification during personal hearing under the chairmanship of officer not below the rank of Joint Secretary. Based on the outcome of the personal hearing if necessary, direction for Compensation/Suspension of EC may be issued.

**7. Action in other scenarios:**

- i. If it is observed that there is imminent risk to the environment and health due to noncompliance by the PP, SCN with time line of Fifteen (15) days is issued to PP. If PP fails to submit the response of SCN within the prescribed time period, if necessary



- a warning letter may be issued otherwise after Fifteen (15) days personal hearing may be conducted under the chairmanship of officer not below the rank of Joint Secretary.
- ii. Based on the outcome of the personal hearing if necessary, direction for Suspension of EC or other prescribed action under EPA may be issued.
  - iii. If it is observed that due to non-compliance, accident has already been taken place, Ministry may immediately suspend the EC of the project till all the conditions are complied and duly verified by concerned IRO.



**(Dr. Shruti Rai Bhardwaj)**  
**Addl. Director/Scientist 'E'**

Encl.: As above

To,  
All Concerned

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to DGF&SS (EF&CC)
5. PPS to AS (TK)/PPS to JS(SKB)
6. Guard File/Spare Copies
7. US(IT)/Consultant(IT)

URGENT  
Speed Post/Online

File no. IA-L-11011/51/2024-IA-I  
Government of India  
Ministry of Environment, Forest and Climate Change  
(I.A. Division)  
\*\*\*\*\*

Indira Paryavaran Bhavan  
Jor Bagh Road, Aliganj  
New Delhi-110 003  
Dated: 13<sup>th</sup> September, 2024

To,

Deputy Director General of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Integrated Regional Office Kendriya Bhawan,  
5th Floor, Sector 'H', Aliganj, Lucknow – 226020

**Sub: Original Application No. 580/2022 titled 'Mukesh Singh v. State of Uttar Pradesh' pending before the NGT (PB), New Delhi - reg.**

Ref:

- i. A copy of O. A. No. No. 580/2022 titled 'Mukesh Singh v. State of Uttar Pradesh' pending before the NGT (PB), New Delhi.
- ii. Ministry's EC letter no. J-11015/255/2006-IA-II(M) dated 23.03.2016
- iii. Ministry's EC letter no. J-11015/255/2006-IA-II(M) dated 27.07.2022
- iv. Ministry's EC letter no. J-11015/255/2006-IA-II(M) dated 07.02.2024

Sir/Madam,

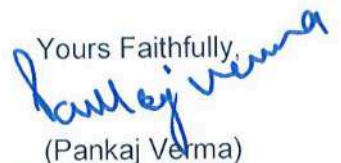
This is in reference to the Original Application No. 580/2022 titled 'Mukesh Singh v. State of Uttar Pradesh' pending before the NGT (PB), New Delhi. The applicant's grievance is regarding dumping of overburden (OB) by the Khadia Project of Northern Coalfields Limited (NCL) near Nawatola village in Sonbhadra, Uttar Pradesh, which is causing severe air pollution and health issues for the local residents. The Applicant claims that the dumping, occurring just 40 meters from the village, violates the Air (Prevention and Control of Pollution) Act, 1981, and other environmental laws.

2. In this regard, the Regional Office (RO) of the Ministry at Lucknow is requested to furnish a (i) factual status report concerning the issues raised in the application, along with (ii) condition-wise compliance status report (s) for all the ECs associated with the project.

3. Being a Court Matter, the reports may be furnished to the Ministry at the earliest.

This issues with the approval of the competent Authority.

Enclosed: as above.

Yours Faithfully,  


(Pankaj Verma)  
Add. Dir./Scientist 'E'  
Email: [Pankaj.verma@nic.in](mailto:Pankaj.verma@nic.in)  
Tel: 011-20819270 (O)



भारत सरकार  
पर्यावरण, वन एवं जलवायु परिवर्तन मन्त्रालय  
क्षेत्रीय कार्यालय, लखनऊ  
Government of India  
Ministry of Environment, Forest & Climate Change  
Regional Office, Lucknow



केन्द्रीय भवन, 11वां तल, सेक्टर एच, अलीगंज लखनऊ 226024  
Kendriya Bhawan, 11<sup>th</sup> Floor, Sector-H, Aliganj, Lucknow-226024, Telefax-2326696  
Email:roc.lko-mef@nic.in

## Monitoring Report

| S.N. | Items   | Details  |
|------|---|--|
| 1.   | परियोजना का नाम<br>Name of Project  | Khadia Opencast coal mine expansion project from 10 MTPA to 14 MTPA in an area of 1640 ha., located in Sonebhadra M/s Northern Coalfield Ltd.  |
| 2.   | परियोजना प्राधिकरण का पता<br>Address of project authorities               | General Manager,<br>M/s Northern Coalfield Ltd. Khadia Area,   |
| 3.   | पर्यावरणीय स्वीकृति पत्र सं० एवं तिथि<br>Env. Clearance letter no. & Date | A ) J-11015/255/2006 IA. II (M) dated 23-03-2016<br>B ) EC NO. J-11015/ 255 / 2006 - IA.II(M) dated 27.07.2022 (15 MTPA)<br>c) EC NO. J-11015/ 255 / 2006 - IA.II(M) dated 07.02.2024 EXPANSION of PROJECT (15 MTPA) |
| 4.   | क्षेत्रीय कार्यालय पत्र सं०<br>Regional Office File no.                   | IV/ENV/UP/MINE-50/409/2016<br>IV/ENV/UP/MINE-62/644/2016   |
| 5.   | स्थल दौरा तिथि<br>Date of site visit                                      | 27-28 Nov, 2024  |
| 6.   | परियोजना की स्थिति<br>Status of Project                                   | Operational  |

## 7. स्थलदौरा के दौरान अवलोकन / Observations made during the site visit:

During monitoring of the project, various officers were present including Shri R K Awasthi, Project Officer, Shri Santosh Kumar, Colliery Manager, Shri Rohit Kumar Gupta, Dy. Manager (Environment), Shri Vedant Dwivedi, Assitant Manager (Environment) Khadia Area etc. The total leases of the project is 1640 Ha (1332 Ha in UP state and 308 Ha in MP state). Out of the total land area, 844 area is forest land, 449 ha is government land, and 347 ha is tenancy land. This lease has three seams, PAs have linkage with Anpara TPS (1630 MW) of UPRVUNL, Lanco Anpara TPS (1200 MW) of UPRVUNL, and Basket Linkage of NCL.

As per the record, PAs have obtained first EC i.e., for 4.00 MTPA; Vide No. J- 11015/1/85 -IA.II, dated 30-07-1990, which was expanded to 10.00 MTPA; The project has obtained prior EC for 10.00 MTY of coal production vide letter no. J-11015/255/2006.IA.II (M) dated 10.04.2007 and project expanded production to 14.00 MTPA; vide no. J-11015/ 255 / 2006 - IA.II (M) Dated 23.03.2016 with EC validity 30 years or life of mine, whichever is earlier, under clause 7(ii) of EIA Notification, 2006. Ministry vides no. J-11015/ 255 / 2006 - IA.II(M) Dated: 27.07.2022 for 15.00 MTPA; EC validity 30 years or life of mine, whichever is earlier, under clause 7(ii) of EIA Notification, 2006

Recently, Ministry revalidated the above EC Vide No. J-11015/ 255 / 2006 - IA.II(M) Dated: 07.02.2024 with EC validity 30 years or life of mine, whichever is earlier, under clause 7(ii) of EIA Notification, 2006. PAs have obtained 1305 Ha of Forest Land (Khadia & Dudhichua combined) in UP State granted vide 8-298/87-FC dated

30/07/1990 and 180 Ha of Forest Land in MP State granted vide 8-83/2005-FC dated 14/09/2010. PAs have obtained CTE from MPPCB vide no: Outward No:-116611,12/10/2022, Consent No: CTE-56845, Dated 12.10.2022, which is valid up to 31.08.2027 and from UPPCB vide no. 162337/UPPCB/Sonebhadra(UPPCBRO)/CTE/SONBHADRA/2022, Date: 02.10.2022, which is valid up to 27.09.2027.

PAs have also obtained CTO by UPPCB vide letter no. 166971/UPPCB/Sonebhadra (UPPCBRO)/CTO/both/SONBHADRA/2022 dated 12.12.2022, which is valid up to 31.12.2024 for 12.38 Million Ton per year. And by MPPCB vide letter no. Outward No: 118963, dated 05/10/2023 Consent No: AW-58998, which is valid up to 31.12.2024. PAs have obtained No Objection Certificate (NOC) For Ground Water Abstraction by the Government of India Ministry of Jal Shakti Department of Water Resources, River Development & Ganga Rejuvenation Central Ground Water Authority CGWA/NOC/MIN/ORIG/2023/19303 dated 22/09/2023, which is valid up to 23/03/2024. PAs have obtained PESO License vide no. P/CC/UP/14/10738 (P428714); validity up to 31.12.2022 and vide license no. P/CC/UP/14/10738 (P428714); dated 11.12.2023, which is valid up to 31.12.2024. Bio-medical waste granted vide No: 11673311 (one-time authorization). PAs have also obtained Hazardous waste authorization granted 16980/UPPCB/Sonebhadra (UPPCBRO)/HWM/SONBHADRA/2022 dated 11.07.2022, which is valid up to 11.07.2027 for Used Oil (Sch-1, Cat-5.1) with 250 KL/Annum and Oil Contaminated Waste (Schedule-1, Cat-5.2) with 30 MT/year. The mining plan and Mine Closure Plan for enhanced coal production of 14 to 15 MTPA for Khadia Opencast Project were approved by the NCL Board.

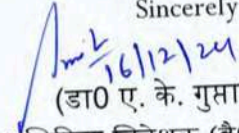
As per the information submitted by PAs, coal production since 2016-17 is tabulated below:

| Year    | Coal Production in (Million T)   |                                 |                                  |
|---------|----------------------------------|---------------------------------|----------------------------------|
|         | In UP<br>with an area of 1332 ha | In MP<br>with an area of 308 ha | Total with an<br>area of 1640 ha |
| 2016-17 | 3.453                            | 2.553                           | 6.006                            |
| 2017-18 | 5.163                            | 3.637                           | 8.8                              |
| 2018-19 | 6.958                            | 4.442                           | 11.4                             |
| 2019-20 | 8.302                            | 4.881                           | 13.183                           |
| 2020-21 | 7.8905                           | 6.1095                          | 14                               |
| 2021-22 | 8.659                            | 5.34                            | 14                               |
| 2022-23 | 9.73                             | 5.269                           | 15                               |
| 2023-24 | 9.26                             | 5.74                            | 15                               |

As per the information submitted, the no. of Project affected families: 767, Cost of R&R – land compensation cost, house, well, tree compensation cost, etc. Rs. 169.52 lakhs, Cost of Rehabilitation in the form of land/house etc. - Rs. 306.8 Lakhs. During the day of inspection, it was found that PAs have complied or are in the process of complying with the stipulated environmental conditions for this project, however, various non-compliances were observed and are as follows:

- It has been found that hazardous waste handling and management is very pathetic on the project site. It seems all concerns involving its management are unfamiliar with the Hazardous waste authorization handling and its management Rules, Guidelines, etc. It is of utmost importance to organize training for officers/workers involved in its handling and management. In addition to the above, spillage of waste lubricating oil, etc can be collected and stored in the dedicated drum, and the storage area can also be repaired/constructed as per the Guidelines.
- It has been found that every dumper/machinery etc vendor has their own workshop, where a significant amount of waste lubricating oil etc. considered as hazardous waste, has been thrown/spilled. For better hazardous waste management at the project level, it is required to accommodate all vendors in demarcated cemented areas places, etc.

- c) It has been found that the generated ETP sludge is being dumped with OB, without consulting with the UPPCB/CPCB. It is required to dispose of ETP sludge as per the CPCB guidelines.
- d) It has been found that major internal road has not been cemented/blacktopped so far. It is required speed up the construction of majority of internal roads on a priority basis, which helps to control dust emission, smooth transportation of coal, maintenance of vehicles etc.,
- e) It has been found that the management of OB (active and non-active) is not up to the mark, various issues including benching, slope, garland drain, Gabion wall/retaining wall, the density of the plantation on the patches of reclaimed OB etc need to be re-assess and take suitable action for better management and compliance. The condition of the old (in the years 1990-2005) biologically reclaimed Overburden (OB) has not been properly reclaimed so far. It is of utmost importance to take suitable measures for its reclamation in to too.
- f) It has been found that the PAs have developed non-significant green cover on the OB dumps. In addition to the above PAs have also not developed three tire plantations in and around the boundary of the mining lease. It is required to conduct a massive drive of the plantation during the ongoing monsoon period to strengthen the green belt on OB as well as the boundary of the mining lease,
- g) It has been observed that various non-native plants have also been planted on the OB dump for biological reclamation. It is required to stick with native species for better biological reclamation of the OB dump only.
- h) It has been found that PAs have yet not developed 10 ha Sal nursery so far. It is required to take suitable action for the setting of Sal Nursery on a priority basis.
- i) It has been found that the management of water sprinklers (Fixed/moveable and mist gun) should be reviewed at the project level, for better and more efficient management. Nozal of fixed sprinklers can be cleaned/replaced regularly for their meaningful uses.
- j) It has been found that the wheel washing system has not been done so far. It is directed to construct as early as possible to control the dust.
- k) As per the submitted analysis report data of various parameters are found within the permissible limits. Besides, values of SPM, RPM & PM<sub>2.5</sub> in various locations are found above the permissible limits. It is required to take suitable measures for its controlling,
- l) It has been found that PAs have yet not constructed bio-toilet in the study village. It is required to construct a bio-toilet as early as possible.
- m) It has been found that the CEQMS has been installed in ETP. However, the Connectivity of installed CEQMS with SPCB and CPCB server is in progress. It is required to expedite the above work.
- n) It has been found that the procurement of electric vehicles has not been done so far. It is directed to take suitable action for the procurement of electric vehicles on a priority basis.
- o) It has been found that the PAs have yet not commissioned solar lighting systems on the road used for the transportation of the coal and solar park. It is required to take suitable action on the execution of the solar lights on the transportation road and solar park at earliest.
8. निर्णय लिया यदि कोई/(Action taken (if any): A letter has been issued to PAs to take corrective measures on the above non-compliance issues.

Sincerely,  
  
 (डा० ए. के. गुप्ता)  
 अतिरिक्त निदेशक (वै०)

| A       |  | EC dated J-11015/255/2006 IA. II (M) dated 23-03-2016  |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
|---------|--|--|--------|------|--------------------------------|--|--|-------|-------|-------|---------|-------|-------|-------|---------|-------|-------|-----|---------|-------|-------|------|---------|-------|-------|--------|---------|--------|--------|----|---------|-------|------|----|---------|------|-------|----|---------|------|------|----|
| S.N.    | Specific Condition   | Compliance Status.   |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| i.      | The maximum production from mine at any given time shall not exceed the limit as prescribed in the EC.   | <p>As per the discussion held during monitoring of the project and report submitted by PAs, as per the information provided the maximum production from the mine has never exceeded 14 MTY i.e., the limit prescribed in the EC Coal. Coal production since grant of EC is as follows.</p> <table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="3">Coal Production in (Million T)</th> </tr> <tr> <th>In UP</th> <th>In MP</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>3.453</td> <td>2.553</td> <td>6.006</td> </tr> <tr> <td>2017-18</td> <td>5.163</td> <td>3.637</td> <td>8.8</td> </tr> <tr> <td>2018-19</td> <td>6.958</td> <td>4.442</td> <td>11.4</td> </tr> <tr> <td>2019-20</td> <td>8.302</td> <td>4.881</td> <td>13.183</td> </tr> <tr> <td>2020-21</td> <td>7.8905</td> <td>6.1095</td> <td>14</td> </tr> <tr> <td>2021-22</td> <td>8.659</td> <td>5.34</td> <td>14</td> </tr> <tr> <td>2022-23</td> <td>9.73</td> <td>5.269</td> <td>15</td> </tr> <tr> <td>2023-24</td> <td>9.26</td> <td>5.74</td> <td>15</td> </tr> </tbody> </table> <p><b>Being Complied</b></p> |        | Year | Coal Production in (Million T) |  |  | In UP | In MP | Total | 2016-17 | 3.453 | 2.553 | 6.006 | 2017-18 | 5.163 | 3.637 | 8.8 | 2018-19 | 6.958 | 4.442 | 11.4 | 2019-20 | 8.302 | 4.881 | 13.183 | 2020-21 | 7.8905 | 6.1095 | 14 | 2021-22 | 8.659 | 5.34 | 14 | 2022-23 | 9.73 | 5.269 | 15 | 2023-24 | 9.26 | 5.74 | 15 |
| Year    | Coal Production in (Million T)   |  |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
|         | In UP  | In MP  | Total  |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2016-17 | 3.453  | 2.553  | 6.006  |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2017-18 | 5.163  | 3.637  | 8.8    |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2018-19 | 6.958  | 4.442  | 11.4   |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2019-20 | 8.302  | 4.881  | 13.183 |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2020-21 | 7.8905   | 6.1095   | 14     |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2021-22 | 8.659  | 5.34   | 14     |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2022-23 | 9.73   | 5.269  | 15     |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| 2023-24 | 9.26   | 5.74   | 15     |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| ii.     | The validity of the life of the mine or as specified in the EIA Notification 2006, whichever is earlier.   | <p>PAs agreed with the validity of the EC shall be as specified in the EIA Notification, 2006 and its subsequent amendment.</p> <p><b>Agreed</b></p>   |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| iii.    | All the measures detailed in Mining Plan and Mine Closure Plan shall be implemented.   | <p>As per the discussion held during the project's monitoring and the report submitted by PAs, the Khadia Project has assured that all measures detailed in the Mining Plan and Mine Closure Plan are being implemented.</p> <p><b>Assured to Comply</b></p>   |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| iv.     | OB from Dudhichua mine shall be used for backfilling of mine void. At the mine closure 39 ha of void will be filled to near ground level.                          | <p>As per the discussion held during the project's monitoring and the report submitted by PAs, it has been assured that at the mine closure, the 39 ha void will be backfilled to near ground level using OB from the Dudhichua mine.</p> <p><b>Assured to Comply</b></p>  |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| v.      | The CHP will be completed by October, 2016 which will meet the production of 10 MTPA plus some additional requirements.  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the construction of additional CHP (6 MTY) is completed in March 2018. 10 MTPA plus some additional coal is being dispatched through CHP.</p> <p><b>Being Complied</b></p>  |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| vi.     | The additional production should be met after completion of CHP.   | <p>As stated earlier that the PAs have completed the construction of additional CHP (6 MTY) and commissioned in March 2018. Additional production of coal is being done only after the construction of additional CHP and Khadia Project crossed the 10 MTPA mark in 2018-19 onwards.</p> <p><b>Being Complied</b></p>   |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| vii.    | Presently road transport of coal to Anpara TPP will be converted to rail dispatch after the completion of the Khadia new CHP and the railway siding at Anpara TPP. | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the new CHP has been linked with the MGR system and the majority of current transport is being done through MGR dispatch.</p> <p><b>Being Complied</b></p>  |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |
| viii.   | The proposal for road transport of the   | <p>As per the discussion held during the monitoring of the project and</p>   |        |      |                                |  |  |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |         |        |        |    |         |       |      |    |         |      |       |    |         |      |      |    |

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|       | e-auction coal is up 10 percent of the production is agreed.  | report submitted by PAs, it has been found that the Khadia Area is equipped with CHP of 10 MTY, through which coal is being dispatched through merry-go-round (MGR) arrangement. Besides that, infrastructure of other projects of NCL is being utilized for coal transportation through rail mode. Around 2.19 MT / Annum of coal is being dispatched using CHP of Krishnashila project and approx. 2 MT/Annum is being dispatched through Jhingurdah Wharf wall. Further an additional Rapid Loading System (RLS) of 04 MTY capacity is under construction.<br><b>Being Complied</b> |
| IX.   | The production shall be within the same mining lease area.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the production of coal is being done within the same mining lease area.<br><b>Being Complied</b>  |
| X.    | The OB shall be completely re-handled at the end of the mining.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have assured to comply this condition and the end of mining.<br><b>Assured to Comply</b>   |
| XI.   | Garland drains be provided.   | As per the discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs have constructed around 14 km length of garland drains to avoid siltation. The present status of the Garland drain is not as per the requirement, it is of utmost important to construct and maintain in all around the OB dumps etc area for better management of the storm water in the above lease.<br><b>Partially Complied</b>  |
| XII.  | Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.                                       | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs abide by this condition. Besides, no major river or nallah passing in to this lease.<br><b>Not Applicable</b>  |
| XIII. | The land after mining shall be brought back for agriculture purpose.  | As stated earlier, above mine is still running. PAs have assured to this condition.<br><b>Assured to Comply</b>  |
| XIV.  | Mine water should be treated for discharge into the lagoon. The quality of the lagoon water shall be regularly monitored and mitigation measures taken. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs are having 38.4 MLD ETP, which is found working during monitoring of the project. Treated water is being used for the sprinkling, firefighting and green belt development purposes.<br><b>Being Complied</b>   |
| XV.   | The CSR cost should be as per the prevalent policy of Ministry of Coal or the Coal India Limited.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the CSR cost is as per prevalent policy i.e. 2% of the average net profit of the immediate preceding three financial years or Rs. 2 per tonne of coal production of previous year whichever is higher.<br>The CSR expenditure of the last 03 years is as under:-<br>2018-19 = 3.85 crore<br>2019-20 = 5.66 crore<br>2020-21 = 5.25 crore<br>2021-22 = 6.84 Crore  |

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|        |  | 2022-23 = 5.43 Crore<br>2023-24 = 7.65 Crore<br><b>Being Complied</b>   |
| XVI.   | Everybody in the core area should be provided with mask for protection against fugitive dust emissions.  | As per the discussion held during the monitoring of the project and the report submitted by PAs, it has been found that none of the workers wore dust masks during the monitoring of the project. It is important to ensure 100% compliance with this condition.<br><b>Not Complied</b>   |
| XVII.  | Dusk mask to be provided to everyone working in the mining area.   | As per the discussion held during the monitoring of the project and the report submitted by PAs, it has been found that none of the workers wore dust masks during the monitoring of the project. It is important to ensure 100% compliance with this condition.<br><b>Not Complied</b>   |
| XVIII. | The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.   | As per the discussion held during the monitoring of the project and the report submitted by PAs, it has been found that none of the workers wearing dust masks including those working in the core area during the monitoring of the project. It is important to ensure 100% compliance with this condition.<br><b>Not Complied</b> |
| XIX.   | People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mining area.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been informed that the periodical health checkup of more than 20% of mine workers is being done annually at the company hospital for compliance with the provisions of The Mine Rules, 1955.<br><b>Being Complied</b>           |
| XX.    | Mining area should be granted by green belt having thick closed thick canopy of the tree cover.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the developed green belt is insignificant. PAs have informed us that the massive green belt drive has been planned, which is accomplished during the incoming monsoon.<br><b>Partially Complied</b>             |
| XXI.   | The embankment constructed along the river boundary shall be of the suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilized with plantation so as to withstand the peak water flow and prevent water inundation. | There is no river near the mine premises.<br><b>Not applicable</b>  |
| XXII.  | There shall be no overflow of OB into the river and into the agricultural field and massive planation of native species shall be taken up in the area between river and the project.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that there is no river near the mine premises. Non-significant plantation is being done on Overburden dumps. As informed, planation is being conducted by UP Forest department.<br><b>Partially Complied</b>        |

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| XXIII. | <p>OB shall be stacked at two earmarked external OB dumpsites only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of exclaimd reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest &amp; Climate Change and its concerned regional office on yearly basis.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, As stated that the height and width of benches in OB dumps are maintained within permissible limits and wherever possible stabilized with plantation. The external as well as internal dumps have not achieved their projected height (500m above MSL). Backfilling and concurrent reclamation is a continuous process. Approx. 161.5 Ha. OB dump area (56 Ha internal and 105.5 Ha external) has been reclaimed up to 30.09.2021 by the plantation through the UP Forest department. The ultimate slope of the dump will not exceed 28". It has been mentioned in the EC that the total of 1255.72 Mm<sup>3</sup> of OB shall be stacked at earmarked sites of external dump (258 ha) and internal dump (808 ha.) The height and width of benches in OB dumps are maintained within permissible limits and wherever possible, established limits with plantation. It has been stated that the external as well as internal dumps have not achieved its projected height. Backfilling and concurrent reclamation is a continuous process. Approx. 161.5 Ha OB dump area (56 Ha internal and 105.5 Ha external) has been reclaimed up to 30.09.2021 by the plantation through the UP Forest department. The ultimate slope of the dump will not exceed 28°. As informed, OB Dumping in M.P. state has not achieved the final height. In the U.P. state, total of 21,39,655 sapling (Native species) were planted at Khadia Project from 1987-88 to Sept'21 through the UP Forest Department, Renukoot forest division. PAs have yet not developed a 3-tier plantation on road roadside. It is required to construct a major road at the earliest to control dust emissions within the lease area. In addition to the above, it is of utmost importance to develop three tier planation all along the major road for better attenuation of the dust and CO<sub>2</sub>. Management of OB dump is not up to the mark. Density of the plantation in various patches of OB need to re-check, and vacant area will full filled by planting more plant species for proper reclamation of OB.</p> <p><b>Partially complied</b></p> |
| XXIV.  | <p>Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flow from soil. OB and mineral dumps. The water so collected shall be utilised for watering the mine area, road, green belt development, etc. The drains Shall be regularly desilted and maintained properly. Garland drains (size, gardient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall</p> | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have constructed catch drains/Siltation ponds/retaining walls)/Gabions to arrest silt/sediment flow from the soil. OB and mineral Jumps. The water so collected is created in ETP and utilized for watering the mine area, roads, green belt development, etc. As stated the drains are regularly desilted. Garland drains and sump capacity provide a safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Mine Sump of appropriate capacity is constructed which provides a safety margin over and above the peak sudden rainfall and provides settling of silt material. It has been found that the management of</p>  |

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|         | and maximum discharge in the area adjoining the mine site. Sump capacity shall also adequate retention the period to allow proper settling of silt material.  | OB (active and non-active) is not up to the mark, various issues including benching, slope, the density of the plantation, garland drain, Gabion wall/retaining wall etc need to be re-asses and suitable action for better management and compliance.<br><b>Partially Complied</b>   |
| XXV.    | Dimension of the retaining wall at the toe of the dump and OB benches within the mine to check runoff and siltation shall be based on the rainfall data.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the height of the retaining wall varies from 2 m to 4m depending on the site conditions.<br><b>Being Complied</b>  |
| XXVI.   | Crusher at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs having CHP (04 MTY) of Khadia project is equipped with a Dust extraction system (Cyclone), Dust Suppression system, etc. The CHP is having fully enclosed/covered coal conveying system. Besides, significant dust emission in the above CHP has been observed, the efficiency of the sprinkler and dust extraction system needs to be re-assessed and suitable action will be taken on a priority basis for controlling dust emission in the CHP area.<br><b>Partially Complied</b>  |
| XXVII.  | Drills shall be wet operated.   | As per the discussion held during monitoring of the project and report submitted by PAs, it has been stated that the drills are either wet operated and /or are provided with highly effective dust extractors, guards & dust collectors.<br><b>Being Complied</b>  |
| XXVIII. | The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have yet not constructed (cemented or black topped) the all internal road used for transportation of mineral in the mine area. Very small patch of major road has been constructed so far. PAs have yet not developed 3-tier planation on road side. It is required to construct major road at earliest for controlling of dust within the lease area. In addition to above it is utmost important to developed three tier planation all along the major road for better attenuation of the dust and CO <sub>2</sub> .<br><b>Not complied</b> |
| XXIX.   | Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs are using controlled blasting with use of delay detonators in between 01:00 PM to 02:00 PM. The ground vibrations are regularly monitored and kept controlled. Fly rocks are checked and blasting shelters are used.<br><b>Being Complied</b>   |
| XXX.    | A Progressive afforestation plan shall be implemented at the end of mining, which includes reclaimed External OB dump area (258 ha), Internal OB dump area (808 ha) and Green belt (49 ha) and in township located outside the lease by planting native species in          | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been mentioned in the EC that the total of 1255.72 Mm <sup>3</sup> of OB shall be stacked at earmarked sites of external dump (258 ha) and internal dump (808 ha.) The height and width of benches in OB dumps are maintained within permissible limits and wherever possible, established limits with plantation. It has been stated that the external as well as internal dumps have not  |

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|        | <p>consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.</p>  | <p>achieved their projected height. Backfilling and concurrent reclamation is a continuous process. Approx. 161.5 Ha OB dump area (56 Ha internal and 105.5 Ha external) has been reclaimed up to 30.09.2021 by the plantation through UP Forest department. The ultimate slope of the dump will not exceed 28°. As informed, OB Dumping in M.P. state has not achieved the final height. In U.P. state, a total of 21,39,655 saplings (Native species) were planted at Khadia Project from 1987-88 to Sept'21 through the UP Forest Department, Renukoot forest division. PAs have yet not developed a 3-tier plantation on the side. It is required to construct a major road at the earliest to control dust emissions within the lease area. In addition to the above, it is of utmost importance to develop a 3-tier plantation all along the major road for better attenuation of the dust and CO<sub>2</sub>. Management of the OB dump is not up to the mark. The density of the plantation in various patches of OB needs to be re-checked, and the vacant patches will be filled by planting more plant species for proper reclamation of OB.</p> <p><b>Partially complied</b></p>   |
| XXXI.  | <p>An estimated total 1255.72 Mm<sup>3</sup> of OB will be generated during the entire life of the mine. Out of which 254.33 Mm<sup>3</sup> of OB will be dumped in two external OB Dumps an earmarked area covering 258 ha of land. 1001.72 Mm<sup>3</sup> of will be tow internal OB dump in covering an area of 808 ha. The maximum height of external OB dump will not exceed 28 degrees. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self-submitted to MOEFCC and its Regional Office on yearly basis.</p> | <p>As per the discussion held during monitoring of the project and report submitted by PAs, it has been mentioned in the EC that the total of 1255.72 Mm<sup>3</sup> of OB shall be stacked at earmarked sites of external dump (258 ha) and internal dump (808 ha.) The height and width of benches in OB dumps are maintained within permissible limits and wherever possible, established limits with plantation. It has been stated that the external as well as internal dumps have not achieved their projected height. Backfilling and concurrent reclamation is a continuous process. Approx. 161.5 Ha OB dump area (56 Ha internal and 105.5 Ha external) has been reclaimed up to 30.09.2021 by the plantation through the UP Forest department. The ultimate slope of the dump will not exceed 28°. As informed, OB Dumping in M.P. state has not achieved the final height. In U.P. state, a total 21,39,655 saplings (Native species) were planted at Khadia Project from 1987-88 to Sept'21 through the UP Forest Department, Renukoot forest division. PAs have yet not developed a 3-tier planation on the side. It is required to construct the major road at the earliest for controlling dust emissions within the lease area. In addition to the above, it is of utmost important to develop three-tier plantations all along the major road for better attenuation of the dust and CO<sub>2</sub>. Management of OB dump is not up to the mark. The density of the plantation in various patches of OB needs to be re-checked, and the vacant area will filled by planting more plant species for proper reclamation of OB. As per the record, PAs are regularly submitting the six monthly compliance reports to this office.</p> <p><b>Partially complied</b></p> |
| XXXII. | <p>The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the restoration and reclamation of the degraded area will be restored as per Mine Closure Plan. The land will be used in a productive and sustainable manner.</p>  |

|              |   | <b>Assured to Comply</b>   |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
|--------------|---|--|--------|--------------------------------------|--|--|--------|--------|--------|--------------|------|------|------|------------|------|------|------|--------|------|------|------|------------|------|------|------|
| XXXIII.      | Compensatory Ecological & Restoration of waste Land other degraded land and OB dumps in lieu of breaking open the land be carried out.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the compensatory Ecological & Restoration of wasteland, other degraded land, and OB dumps instead of breaking open the land is being taken up on a regular basis. It is required to improve OB management including planting of more native species and improving the density of the plant.<br><b>Partially Complied</b>  |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| XXXIV.       | The mining should be phased out in sustainable manner. No extra overburden dumps are permitted.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the mining is being done sustainably as per the approved mine plan. No extra overburden dumps will be created within the lease area.<br><b>Being Complied</b>   |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| XXXV.        | No groundwater shall be used for mining operations.   | As per the discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs have obtained permission for the drawl of water from Rihand reservoir of the G.B. Pant Sagar vide letter no-649-CU-11 / NTPC / 79 dated 13.03.1979, which is being used for mining operation etc. NO groundwater will be used.<br><b>Being Complied</b>  |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| XXXVI.       | OB the total quarry area of 1003 ha. the backfilled quarry area of 808 ha shall be reclaimed with plantation and a void of 39 ha which is proposed to gently sloped and stabilised with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the total quarry area of 1003 ha. the backfilled quarry area of 808 ha will be reclaimed with plantation and at the mine closure. As informed, around 39 ha of the void will be filled to near and ground level by OB from Dudhichua Mine as per specific condition no. iv of this EC.<br><b>Being Complied</b>   |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| XXXVII.      | Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May). Monsoon (August). Post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment, Forests & Climate Change and to the Central Pollution Control Board quarterly within one month of monitoring. | As per the discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs have 6 piezometers. Regular monitoring of groundwater level and quality is carried out through dug wells and piezometers four times a year.<br><table border="1"> <thead> <tr> <th rowspan="2">Well</th> <th colspan="3">Water level in m bgl (Winter Season)</th> </tr> <tr> <th>Feb'22</th> <th>Feb'23</th> <th>Feb'24</th> </tr> </thead> <tbody> <tr> <td>Khadia Basti</td> <td>3.10</td> <td>3.30</td> <td>3.30</td> </tr> <tr> <td>Khadia DAV</td> <td>2.10</td> <td>2.10</td> <td>2.00</td> </tr> <tr> <td>Khadia</td> <td>1.95</td> <td>1.55</td> <td>1.10</td> </tr> <tr> <td>Chilkadand</td> <td>4.70</td> <td>4.30</td> <td>4.55</td> </tr> </tbody> </table><br><b>Being Complied</b> | Well   | Water level in m bgl (Winter Season) |  |  | Feb'22 | Feb'23 | Feb'24 | Khadia Basti | 3.10 | 3.30 | 3.30 | Khadia DAV | 2.10 | 2.10 | 2.00 | Khadia | 1.95 | 1.55 | 1.10 | Chilkadand | 4.70 | 4.30 | 4.55 |
| Well         | Water level in m bgl (Winter Season)  |  |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
|              | Feb'22  | Feb'23   | Feb'24 |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| Khadia Basti | 3.10  | 3.30   | 3.30   |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| Khadia DAV   | 2.10  | 2.10   | 2.00   |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| Khadia       | 1.95  | 1.55   | 1.10   |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| Chilkadand   | 4.70  | 4.30   | 4.55   |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |
| XXXVIII.     | The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the above mine is situated in hilly terrain. Mine & rainwater are collected in sufficient capacity in the mine sump and one large size pond for ground water   |        |                                      |  |  |        |        |        |              |      |      |      |            |      |      |      |        |      |      |      |            |      |      |      |

|        |  |   |
|--------|--|---|
|        | water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.   | recharge. The rainwater harvesting has been done at eight places including the administrative building (GM office). Besides, the groundwater level (by 6 piezometers) & quality of nearby areas is regularly being monitored. As informed, the water requirement of the nearby village(s) is being provided by the project.<br><b>Being Complied</b>  |
| XXXIX. | Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have Sewage Treatment Plan (1.5 MLD) in the colony and Effluent Treatment Plant (38 MLD) in mines. During monitoring both treatment facilities are found working. Workshop mine water and CHP waste Water are being treated at ETP and the treated water is being reused in the mine. The spillage discharge conforms to GSR 742(E) dated 25.09.2000 standards for Coal mines.<br><b>Being Complied</b> |
| XL.    | Besides carrying out regular periodic health check-up of their workers. 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment. If any, through a specialized agency/institution within the District/State and the results reported to this Ministry and to DGMS. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the occupational health check of 20% of mine workers is being done annually at the company hospital in compliance with the provisions of the Coal Mine Rules. Besides this, a Work order has been issued to SMHRI institute for carrying out regular periodic health check-ups of 10% of the workers engaged in Khadia Area, NCL.<br><b>Being Complied</b>   |
| XLI.   | Land austeers shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or RAR Policy of the State Government whichever is higher  | As per the information submitted it has been found that the no Project affected families – 767, Cost of R&R – land compensation c house, well, tree compensation cost etc. 169.52 lakhs, Cost Rehabilitation in the form of land/house, etc. Rs. 306.8 Lakhs.<br><b>Complied</b>  |
| XLII.  | For monitoring land use pattern and for post mining and use a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEFCC and its concerned Regional office.                   | As per the discussion held during monitoring of the project and report submitted by PAs, it has been found that the digital processing of the entire lease area using remote sensing technique is done by CMPDIL Ranchi. The latest report for the year 2020 published in March 2021 has also been uploaded on the website of NCL, <a href="http://www.nclcil.in">www.nclcil.in</a> .<br><b>Being Complied</b>  |
| XLIII. | A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment Forests & Climate Change within 6 months of grant of Environmental Clearance.   | As stated earlier the approved mine closure plan for Rs. 16933.47 Lakhs closure cost has already been submitted to RO-MOEF&CC, Lucknow on 31.05.2016 and The approved mine plan and mine closure plan for 15 MTPA has been submitted to the Regional Office of MoEF&CC vide letter dated 28.11.2022.<br><b>Complied</b>   |
| XLIV.  | The project authorizes shall in consultation with the Panchayats of the local villages and administration identify scio-economic and welfare measures  | As per the discussion held during the monitoring of the project and report submitted by PAs, as informed, PAs remain in consultation with the Panchayats of local villages and administration to identify socio-economic and welfare measures for CSR activities. As stated   |

|                           | under CSR to be carried out over the balance life of the mine.   | earlier, PAs are providing drinking water in nearby villages etc.<br><b>Being Complied</b>  |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|---------------------------|--|---|--------|--------------------------------|--|--|-------|-------|-------|---------|-------|-------|-------|---------|-------|-------|-------|---------|-------|-------|-----|---------|-------|-------|------|---------|-------|-------|--------|
| XLV.                      | <b>Corporate Environment Responsibility:</b>   |   |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|                           | a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.  | Coal India has an approved Corporate Environmental Policy.<br><b>Complied</b>   |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|                           | b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringement/ deviation/ violation of the environmental or forest norms/conditions.  | The objective of approved Corporate Environment Policy states for compliance of conditions stipulated in Environmental Clearance/Forest Clearance/ or any other statutory conditions issued by regulatory agencies.<br><b>Complied</b>  |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|                           | c) The hierarchical system o Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.   | As per the discussion held during monitoring of the project and report submitted by PAs, as informed, at the area level, the Environment Cell is headed by the Staff Officer (Mining) who directly reports to the General Manager, Khadia Project. At Northern Coalfields Limited H. Qtrs. a full-fledged Environment Management Department is headed by the General Manager (environment) under the control of the Director (Tech. /P&P) who directly reports to the CMD. NCL.<br><b>Being Complied</b>  |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|                           | d) To have proper checks and balances, the company shall have a well laid down 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. | As stated earlier, PAs are having well laid down EMC cell, who is taking care of Environmental compliance. Besides, Northern Coalfields Limited is an ISO 14001:2015 certified company which automatically provides platform for management review.<br><b>Being Complied</b>  |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| <b>General Conditions</b> |  |   |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| I.                        | No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forest & Climate Change.  | As per discussion held during monitoring of the project and report Env. Clearance letter no. J-11015/255/2006-IA-II(M) dated 07.02.2024 has been issued from MOEF for Khadia Expansion Project (15MTY). No change in mining technology and scope of work will be made without prior approval of the Ministry of environment and Forests submitted by PAs, it has been noticed that the<br><b>Being Complied</b>   |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| II.                       | No change in the calendar plan of production for quantum of mineral coal shall be made.  | PAs have assured that the no change in the calendar plan including excavation & quantum of mineral coal will be made.<br><table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="3">Coal Production (in Million T)</th> </tr> <tr> <th>In UP</th> <th>In MP</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2015-16</td> <td>2.325</td> <td>4.410</td> <td>6.735</td> </tr> <tr> <td>2016-17</td> <td>3.453</td> <td>2.553</td> <td>6.006</td> </tr> <tr> <td>2017-18</td> <td>5.163</td> <td>3.637</td> <td>8.8</td> </tr> <tr> <td>2018-19</td> <td>6.958</td> <td>4.442</td> <td>11.4</td> </tr> <tr> <td>2019-20</td> <td>8.302</td> <td>4.881</td> <td>13.183</td> </tr> </tbody> </table> | Year   | Coal Production (in Million T) |  |  | In UP | In MP | Total | 2015-16 | 2.325 | 4.410 | 6.735 | 2016-17 | 3.453 | 2.553 | 6.006 | 2017-18 | 5.163 | 3.637 | 8.8 | 2018-19 | 6.958 | 4.442 | 11.4 | 2019-20 | 8.302 | 4.881 | 13.183 |
| Year                      | Coal Production (in Million T)   |   |        |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
|                           | In UP  | In MP   | Total  |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| 2015-16                   | 2.325  | 4.410   | 6.735  |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| 2016-17                   | 3.453  | 2.553   | 6.006  |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| 2017-18                   | 5.163  | 3.637   | 8.8    |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| 2018-19                   | 6.958  | 4.442   | 11.4   |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |
| 2019-20                   | 8.302  | 4.881   | 13.183 |                                |  |  |       |       |       |         |       |       |       |         |       |       |       |         |       |       |     |         |       |       |      |         |       |       |        |

|                                       |   | 2020-21   | 7.8905          | 6.1095          | 14.00 |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
|---------------------------------------|---|---|-----------------|-----------------|-------|-------------|------------------|-------------------|-----------------|-----------------|---------------------------------|--|--|--|--|-------------------|-----|----|----|----|----------------------------------|--|--|--|--|-------------------|----|----|----|----|-----------------------------------|--|--|--|--|-------------------|----|----|----|----|--------------------------------|--|--|--|--|-------------------|----|----|----|----|-------------------------------------|--|--|--|--|-------------------|----|----|----|----|---------------------------------------|--|--|--|--|-------------------|----|----|----|----|
|                                       |   | 2021-22   | 8.659           | 5.340           | 14.00 |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
|                                       |   | 2022-23   | 9.73            | 5.269           | 15    |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
|                                       |   | 2023-24   | 9.26            | 5.74            | 15    |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
|                                       |   | <b>Assured to comply</b>  |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| III.                                  | Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , and NO <sub>x</sub> monitoring location of the stations shall be decided based on the meteorological data. Topo-graphical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board, Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out least once in six months. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have selected four ambient air quality (AAQ) monitoring stations established in the care zone, and four ambient air quality monitoring stations are established in the buffer zone for SPM, RPM, SO <sub>2</sub> , NO <sub>x</sub> and heavy metal monitoring. As per the submitted analysis report data of various parameters are found within the permissible limits. Besides, values of SPM, RPM & PM <sub>2.5</sub> in various locations are found above the permissible limits. It is required to take suitable measures for its control. Additionally, it has been found that the third-party monitoring of the various parameters is being done by the centrally located Environmental laboratory of CMPDIL Jayant, which is neither NABL accredited nor MOEF&CC accredited laboratory. It is required to conduct third-party analysis only by MOEF&CC accredited or NABL accredited laboratory.   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
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| Particulars                           | PM <sub>10</sub>  | PM <sub>2.5</sub>   | SO <sub>2</sub> | NO <sub>x</sub> |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: GM Office KHA3</b>       |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 101   | 36  | 30              | 34              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: Khadia STP KHA4</b>      |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 94  | 34  | 28              | 32              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: IWSS Office KHA5</b>     |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 95  | 35  | 29              | 32              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: Bina STP, BA3</b>        |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 82  | 34  | 27              | 32              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: Indira Bhawan CWA2</b>   |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 97  | 31  | 31              | 26              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| <b>Stations: Kohroul Village KSA4</b> |   |   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| Quarterly Average                     | 79  | 26  | 25              | 31              |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
|                                       |   | <b>Partially Complied</b>   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |
| IV.                                   | Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , and NO <sub>x</sub> ) and heavy metals such as Hg, As, Ni, Cd, Cr, and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and the State Pollution Control Board once in six months, Random verification of samples through analysis from  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have selected four ambient air quality (AAQ) monitoring stations are established in care zone, and four ambient air quality monitoring stations are established in buffer zone for SPM, RPM, SO <sub>2</sub> , NO <sub>x</sub> and heavy metal monitoring. As per the submitted analysis report data of various parameters are found within the permissible limits. Besides, values of SPM, RPM & PM <sub>2.5</sub> in various location are found above the permissible limits. It is required to take suitable measure   |                 |                 |       |             |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |                                  |  |  |  |  |                   |    |    |    |    |                                   |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |                                     |  |  |  |  |                   |    |    |    |    |                                       |  |  |  |  |                   |    |    |    |    |

independent laboratories, recognized under the PPA rules, 1986 shall be furnished as part of compliance report.

for its controlling. Additionally, it has been found that the third party monitoring of the various parameters is being done by centrally located Environmental laboratory of CMPDIL Jayant, which is neither NABL accredited nor MOEF&CC accredited laboratory. It is required to conduct third party analysis only by MOEF&CC accredited or NABL accredited laboratory.

| Core Zone (29/30.03.2022) |                  |                   |                   |                 |                 |                  |
|---------------------------|------------------|-------------------|-------------------|-----------------|-----------------|------------------|
| Locations                 | SPM              | RPM               | PM <sub>2.5</sub> | SO <sub>2</sub> | NO <sub>x</sub> | PM <sub>10</sub> |
| KHA1                      | 817              | 478               | 111               | 37              | 45              | -                |
| KHA2                      | 804              | 536               | 86                | 40              | 48              | -                |
| KHA3                      | -                | -                 | 13<br>1           | 35              | 45              | 300              |
| KHA4                      | -                | -                 | 96                | 38              | 43              | 263              |
| Buffer Zone               |                  |                   |                   |                 |                 |                  |
| Locations                 | PM <sub>10</sub> | PM <sub>2.5</sub> | SO <sub>2</sub>   | NO <sub>x</sub> |                 |                  |
| KHA5<br>(30/31.03.2022)   | 233              | 102               | 35                | 42              |                 |                  |
| BA3<br>(24/25.03.2022)    | 191              | 41                | 33                | 42              |                 |                  |
| CWA2<br>(29/30.03.2022)   | 236              | 30                | 36                | 45              |                 |                  |
| KSA4<br>(25/26.03.2022)   | 86               | 37                | 32                | 37              |                 |                  |

**Partially Complied**

V. Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment Workers engaged in blasting and drilling operations, of HEMM etc. shall be provided with ear plugs/muffs.

As per discussion held during monitoring of the project and report submitted by PAs. It has been found that the PAs have conducted noise level analysis on regular basis. As per the submitted analysis report dated 20.09.2024 data of noise level are found within the permissible limits.

| S. No                                   | Zone        | Date of recording | Day Time | Night Time |
|---|-------------|-------------------|----------|------------|
| <b>Station Name: Mine Site – KHN1</b>   |             |                   |          |            |
| 1                                       | Industrial  | 20.09.2024        | 69.7     | 60.4       |
| <b>Station Name: OB W/Shop – KHN2</b>   |             |                   |          |            |
| 1                                       | Industrial  | 20.09.2024        | 72.8     | 60.1       |
| <b>Station Name: Coal W/Shop – KHN3</b> |             |                   |          |            |
| 1                                       | Industrial  | 18.09.2024        | 72.0     | 61.3       |
| <b>Station Name: Colony – KHN4</b>      |             |                   |          |            |
| 1.                                      | Residential | 20.09.2024        | 47.4     | 39.0       |

**Being Complied**

VI. Industrial wastewater workshop and wastewater from the mine shall be properly collected treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop

As stated earlier that the PAs are having ETP of 38 MLD (38 MLD commissioned on 21.08.2001 for Rs. 1.66 Cr) for the treatment of the industrial waste water including workshop, CHP and waste water from the mine. Treated water is being conform to the prescribed standards. Besides, oil and grease trap has also been installed.

**Being Complied**

| effluents.            |   | First Fortnight data    |   |                         |  |
|-----------------------|---|-------------------------|---|-------------------------|--|
| Parameters            | Sampling station & sampling date/time   |                         |   |                         |  |
|                       | KHW1<br>(Inlet of ETP)  | KHW2<br>(Outlet of ETP) | KHW5<br>(Inlet of STP)  | KHW3<br>(Outlet of STP) |  |
|                       | 04.03.2022  | 04.03.2022              | 04.03.2022  | 04.03.2022              |  |
|                       | 4:35PM  | 4:38PM                  | 4:55PM  | 5:00 PM                 |  |
| TSS                   | 215   | 83                      | 147   | 93                      |  |
| pH                    | 7.30  | 8.04                    | 7.21  | 7.24                    |  |
| Oil & Grease          | 14  | 8                       | 8   | BDL(<4)                 |  |
| COD                   | 144   | 87                      | 101   | 66                      |  |
| BOD                   | 24  | 12                      | 54  | 24                      |  |
| Parameters            | Second Fortnight data   |                         |   |                         |  |
|                       | Sampling station & sampling date/time   |                         |   |                         |  |
|                       | KHW1<br>(Inlet of ETP)  | KHW2<br>(Outlet of ETP) | KHW5<br>(Inlet of STP)  | KHW3<br>(Outlet of STP) |  |
|                       | 21.03.2022 4:35 PM  | 21.03.2022 4:38PM       | 21.03.2022 4:55PM   | 21.03.2022 5:00 PM      |  |
| TSS                   | 245   | 68                      | 158   | 92                      |  |
| pH                    | 7.80  | 8.21                    | 6.92  | 7.12                    |  |
| Oil & Grease          | 12  | 7                       | 7   | BDL(<4)                 |  |
| COD                   | 152   | 83                      | 95  | 52                      |  |
| BOD                   | 20  | 08                      | 50  | 18                      |  |
| <b>Being Complied</b> |   |                         |   |                         |  |
| VII.                  | Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.  |                         | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the vehicular emissions are kept under control by regular maintenance of vehicles. All used vehicle having valid PUC certificate. Major coal transport is made through MGR railway system. Sometimes vehicles are also used for transporting the mineral and are optimally loaded and kept covered.<br><b>Being Complied</b> |                         |  |
| VIII.                 | Monitoring of environmental quality parameters shall be carried out through the establishment of adequate number and type of pollution monitoring and analysis equipment in constricton with the State Pollution Control Board and data got analyzed through a laboratory recognized under EPA Rules, 1986. |                         | As per the discussion held during the monitoring of the project and report submitted by PAs. As stated earlier in the PAs having four monitoring stations it has been found that the third-party monitoring of the various parameters is being done by centrally located Environmental laboratory of CMPDIL Jayant, which is an accredited laboratory.<br><b>Being Complied</b>   |                         |  |
| IX.                   | Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.   |                         | As per the discussion held during the monitoring of the project and the report submitted by PAs, it has been found that none of the workers wore dust masks during the monitoring of the project. It is important to ensure 100% compliance with this condition.<br><b>Partially Complied</b>   |                         |  |
| X.                    | Occupational health surveillance  |                         | As per the discussion held during monitoring of the project and   |                         |  |

|                           | programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.  | report submitted by PAs, it has been stated that the periodic medical health check-up of mine personnel is done regularly and records are maintained in the prescribed form. Besides, majority of the field and off field officer are not wearing required PPEs likes, safety shoes, helmet, dust mask etc. It is utmost important to ensure 100% compliance on Safety.<br><b>Partially Complied</b>  |           |                     |                     |            |                           |            |                       |            |                        |            |
|---------------------------|---|---|-----------|---------------------|---------------------|------------|---------------------------|------------|-----------------------|------------|------------------------|------------|
| XI.                       | A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.  | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs are having dedicated Environmental Management Cell (EMC) is headed by the Staff Officer (Mining) who is directly reporting to the General Manager. Khadia Project At Northern Coalfields Limited Head Qtrs. a with responsibility and accountability to ensure compliance of EC conditions.<br><b>Being Complied</b>  |           |                     |                     |            |                           |            |                       |            |                        |            |
| XII.                      | The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.  | As per the discussion held during the monitoring of the project and report submitted by PAs, as informed, new cost code has been generated in this regard and funds for environmental protection measures have been earmarked. Year-wise expenditure mentioned in the environmental statement is being submitted to MoEF/SPCBs every year. In FY 2020-21. A total of 8.48 Cr rupees were spent on environmental protection measures.<br><b>Being Complied</b>   |           |                     |                     |            |                           |            |                       |            |                        |            |
| XIII.                     | The Project authorities shall advertise at least in two local newspapers widely circulated around the project. one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the Ministry of Environment, Forests & Climate Change at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . | As per the record, PAs had advertised expansion of the project from 10 MTY to 14 MTY has been published in four local newspapers after 7 days (almost after one month) of grant of EC. details of which are as follows:<br><table border="1"> <thead> <tr> <th>Newspaper</th> <th>Date of publication</th> </tr> </thead> <tbody> <tr> <td>Dainik Jagran. Rewa</td> <td>06.04.2016</td> </tr> <tr> <td>Rashtriy Jagran, Varanasi</td> <td>07.04.2016</td> </tr> <tr> <td>Amar Ujala. Varanasi-</td> <td>07.04.2016</td> </tr> <tr> <td>Dainik Bhaskar. Satna-</td> <td>07.04.2016</td> </tr> </tbody> </table><br><b>Not Complied</b> | Newspaper | Date of publication | Dainik Jagran. Rewa | 06.04.2016 | Rashtriy Jagran, Varanasi | 07.04.2016 | Amar Ujala. Varanasi- | 07.04.2016 | Dainik Bhaskar. Satna- | 07.04.2016 |
| Newspaper                 | Date of publication   |   |           |                     |                     |            |                           |            |                       |            |                        |            |
| Dainik Jagran. Rewa       | 06.04.2016  |   |           |                     |                     |            |                           |            |                       |            |                        |            |
| Rashtriy Jagran, Varanasi | 07.04.2016  |   |           |                     |                     |            |                           |            |                       |            |                        |            |
| Amar Ujala. Varanasi-     | 07.04.2016  |   |           |                     |                     |            |                           |            |                       |            |                        |            |
| Dainik Bhaskar. Satna-    | 07.04.2016  |   |           |                     |                     |            |                           |            |                       |            |                        |            |
| XIV.                      | A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad. Municipal Corporation or Urban local body and local NGO. if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.   | As informed, copy of the environmental clearance letter has been submitted to concern Panchayats. Municipal corporation and local administration. it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on company website <a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a><br><b>Complied</b>   |           |                     |                     |            |                           |            |                       |            |                        |            |

|        |  |   |
|--------|--|---|
| XV.    | A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office. District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.  | As informed, copy of the EC letter has been provided to the offices of MPPCB and PPCB both. District Industry Sector and Collector's Office/Tehsildar's Office for more than 30 days.<br><b>Complied</b>  |
| XVI.   | The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>2</sub> and NO <sub>x</sub> . (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website. | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on company website <a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a><br><b>Being Complied</b>  |
| XVII.  | The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Office's of CPCB and the SPCB.  | As per record, PAs are regularly submitting the six monthly compliance report to this office on regular basis.<br><b>Being Complied</b>   |
| XVIII. | The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.   | During monitoring of the project PAs are providing full support to undersigned.<br><b>Being Complied</b>  |
| XIX.   | The Environmental statement for each financial year ending 31 March in Form -V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the  | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on company website <a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a> . Besides, regular submission of the Environmental statement to this office.<br><b>Being Complied</b> |

|     |   |   |
|-----|---|---|
|     | status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF&CC by e-mail.  |   |
| 5.  | The proponent shall abide by all commitments and recommendations made in the EIA/EMP report, presentation to the EAC and also the issues raised during Public Hearing.  | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs are comply or in process of complying the commitments & recommendation made in EIA and EMP of the project.<br><b>Being Complied</b>                               |
| 6.  | The proponent is required to obtain all necessary clearance/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.   | The project abides by this condition.   |
| 7.  | The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Condition.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs are having dedicated Environmental Management Cell with responsibility and accountability to ensure compliance of EC conditions.<br><b>Being Complied</b> |
| 8.  | Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.   | <b>PAs agree with this condition</b>  |
| 9.  | The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention Control of Pollution) Act 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act. 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of law relating to the subject matter. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations. | <b>PAs agree with this condition.</b>   |
| 10. | Any appeal against this environmental clearance shall lie with the National   | <b>PAs agree with this condition.</b>   |

|   | Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.  |   |             |      |             |             |   |       |                           |            |   |       |                             |            |
|---|--|---|-------------|------|-------------|-------------|---|-------|---------------------------|------------|---|-------|-----------------------------|------------|
| 11.   | This EC is in supersession to the earlier EC granted to the project vide letter No. J-11015/255/2006-IA.II (M) dated 10 <sup>th</sup> April, 2007 for 10 MTPA in an area of 1640 ha.   | PAs agree with this condition.  |             |      |             |             |   |       |                           |            |   |       |                             |            |
| <b>EC NO. J-11015/ 255 / 2006 - IA.II(M) dated 27.07.2022 (15 MTPA)</b> |  |   |             |      |             |             |   |       |                           |            |   |       |                             |            |
| I.  | PP shall submit certified compliance report of EC vide no. F. No. J-11015/255/2006-IA.II(M) dated 23.03.2016 granted for total 40 % expansion, along with EIA/EMP report, prepared based on standard ToRs for the additional capacity of 10 % on PARIVESH portal within six months of enhancement of production beyond 40 %. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the certified compliance report for EC of 14 MTPA and EIA/EMP report for 15 MTPA prepared based on Standard ToRs has been submitted to MoEF&CC through Parivesh Portal on 18.01.2023.<br><b>Complied</b>   |             |      |             |             |   |       |                           |            |   |       |                             |            |
| II.   | In view of above (i), Ministry shall ascertain the adequacy of the proposed environmental safeguards and stipulate necessary conditions, if required, which shall be monitored as a part of the EC compliance monitoring.  | The project agrees to this condition.   |             |      |             |             |   |       |                           |            |   |       |                             |            |
| III.  | PP shall obtain necessary prior consent for enhanced capacity from state pollution control board under Air & Water Act.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs have obtained CTO from both UPPCB and MPPCB under Air & Water Act for enhanced production. The details of CTO are as follows.<br><table border="1"> <thead> <tr> <th>SN</th> <th>SPCB</th> <th>Consent No.</th> <th>Valid up to</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MPPCB</td> <td>AW-58998 dated 05.10.2023</td> <td>31.12.2024</td> </tr> <tr> <td>2</td> <td>UPPCB</td> <td>166971 issued on 12.12.2022</td> <td>31.12.2024</td> </tr> </tbody> </table> <b>Being Complied</b> | SN          | SPCB | Consent No. | Valid up to | 1 | MPPCB | AW-58998 dated 05.10.2023 | 31.12.2024 | 2 | UPPCB | 166971 issued on 12.12.2022 | 31.12.2024 |
| SN  | SPCB   | Consent No.   | Valid up to |      |             |             |   |       |                           |            |   |       |                             |            |
| 1   | MPPCB  | AW-58998 dated 05.10.2023   | 31.12.2024  |      |             |             |   |       |                           |            |   |       |                             |            |
| 2   | UPPCB  | 166971 issued on 12.12.2022   | 31.12.2024  |      |             |             |   |       |                           |            |   |       |                             |            |
| IV.   | Environmental quality parameters arising out of proposed expansion shall be within the prescribed norms and same shall be maintained as per prescribed norms.  | As per the discussion held during the monitoring of the project and report submitted by PAs. As per the submitted analysis report Environmental quality parameters arising out of the expansion from 14 MTPA to 15 MTPA are kept within prescribed norms and shall be maintained.<br><b>Being Complied</b>  |             |      |             |             |   |       |                           |            |   |       |                             |            |
| V.  | Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India &  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs have prepared a mine plan and mine closure plan for 15 MTPA (Approved by NCL Board on 30.05.2022). As per the mine plan of 15 MTPA, out of a   |             |      |             |             |   |       |                           |            |   |       |                             |            |

|   |  |
|---|--|
| <p>Ors vide its judgement dated 08<sup>th</sup> January 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after mining activity is over at the cost of mining lease holders/ project proponent.</p> | <p>total 1640 Ha lease hold area, the plantation will be done in around 1378 Ha. The cost of this plantation shall be borne by NCL. Plantation is continuously being done through the UP forest department. In FY 2023-24, plantation on 14.39 Ha of overburden area has been completed up to Sep'23. In FY 2024-25, plantation on 7.27 Ha of overburden dump area has been carried out by UP forest department.</p> <p><b>Being Complied</b></p>  |
| <p>VI. All other terms and conditions as prescribed in Ministry's letter dated 10.04.2007 and 23.03.2016 shall remain the same and need to be complied by PP.</p>   | <p>All other terms and conditions as prescribed in the Ministry's EC letter dated 10.04.2007 and 23.03.2016 are being complied with.</p>   |
| <p><b>Additional Specific Conditions as the area falls under critically polluted area</b></p>   |  |
| <p>I. Transportation of material by rail/conveyor belt shall be implemented</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs is currently equipped with Coal Handling Plants of 04 MTPA and 06 MTPA, through which coal is being dispatched through a Merry-Go-Round Arrangement. In addition to this, currently approx. 2.19 MTPA of coal is being dispatched through Krishnashila CHP and approx. 02 MTPA is being dispatched through the Jhingurdah Wharf wall.</p> <p><b>Being Complied</b></p>   |
| <p>II. Encourage use of cleaner fuel in trucks, if the roads required to be widened up to the nearest railway siding, the same be constructed to avoid traffic congestion.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs is equipped with three nos. of draglines, which are not only electricity driven but also reduce truck movement (which would otherwise be required for transportation of overburden). Besides, a maximum of coal is being transported through Coal Handling Plants of 04 MTY and 06 MTY and are electricity driven, which also reduces truck movement. Besides, dumper/truck using in the mine is still not using cleaner fuel. It is required to take suitable measures to use of cleaner fuel in the truck/dumper.</p> <p><b>Partially Complied</b></p> |
| <p>III. Increase green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs. As per the mine plan of 15 MTPA, out of total 1640 Ha lease hold area, plantation will be done in around 1378 Ha. The plantation is continuously being done through the UP forest department. In FY 2023-24, plantation on 14.39 Ha of</p>   |

|       |   |   |
|-------|---|---|
|       |   | <p>overburden area has been carried out up to March'24. In FY 2024-25, plantation on 7.27 Ha of OB dump is to be carried out by UP forest department. It is required to strengthen the green belt by plating only native species plant all along the mine lease area and on OB dump area on priority basis.</p> <p><b>Partially Complied</b></p>  |
| IV.   | Green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc. shall be implemented.  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found development of the green belt outside the project premises is being done by M/s Northern Coalfields Limited. It is to mention that in FY 2024-25, the plantation was carried out in Renukoot Forest Department on 100 Ha and in Singrauli Forest Division on 270 Ha. It is required to select native species with broad eaves and long-life plants for better attenuation of the dust and CO<sub>2</sub>.</p> <p><b>Partially Complied</b></p>                          |
| V.    | Assessment of carrying capacity of mine and road transportation shall be done as per the state plan/ instructions.  | <p>It has been stated that the carrying capacity of the mine and traffic study is being done through the Central Mine Planning Design Institute and is likely to be completed by January 2025.</p> <p><b>Being Complied</b></p>   |
| VI.   | Reuse / recycle of treated waste water shall be implemented as feasible with latest technology. Zero liquid discharge concept may be adopted.   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the mine water is being re-sued for settling for spraying on haul roads, firefighting, green belt development etc. Zero discharge condition is being maintained. Besides, Waste generated from colony premises is being treated in Sewage Treatment Plant of 1.5 MLD capacity and based on Moving Bed Biofilm Reactor (MBBR) and Dual Media Filter &amp; Activated Carbon Filter and treated water is being used in horticulture.</p> <p><b>Being Complied</b></p> |
| VII.  | PP to install continuous monitoring station for ambient air quality and also continuous effluent quality in ETP shall be installed. Data so generated shall be linked with respective SPCB and CPCB websites. | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs has already installed one no. of continuous ambient air quality monitoring station with connectivity to CPCB and SPCB portal. However, it has been found that the CEQMS has been installed in ETP of Khadia Area, NCL. However, the connectivity of the installed CEQMS with the SPCB and CPCB server is in progress. It is required to expedite the above work.</p> <p><b>Partially Complied</b></p>   |
| VIII. | A detailed water harvesting plan may be prepared by the project proponent for water augmentation and submitted to Regional Office of MoEF&CC.   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs are currently equipped with 07 nos. of rainwater harvesting structures.</p> <p><b>Being Complied</b></p>  |
| IX.   | The project proponent shall install STP for generated domestic wastewater and should meet for discharge standards   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found PAs are equipped with a sewage treatment plant of 1.5 MLD capacity, and treated water is being reused in horticulture.</p> <p><b>Being Complied</b></p>   |
| X.    | More stringent norms for management of hazardous waste like oil container,  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the generated</p>   |

ETP sludge etc shall be adopted. The waste generated should be preferably utilised in co-processing.

municipal solid waste from the township, is being addressed by the Solid Waste Management Rules, 2016 and Hazardous Wastes generated in the mines are being addressed in accordance to the Hazardous & Other Waste Management Rules, 2016. Brief details of the Hazardous Wastes generated in the mine and their treatment methods are as given below:

| Type of HW  | Mode of Disposal  |
|---|---|
| Used or Spent Oil (Sch I, Cat. 5.1)                 | Sold to Authorized Re Processors/Recycler               |
| Wastes or residues containing oil (Sch I, Cat. 5.2) | Being disposed of through authorised disposal facility. |

However, it has been found that the hazardous waste handling and management is very pathetic on the project site. It seems all concerns involving its management are unfamiliar with the Hazardous waste authorization handling and its management Rules, Guidelines, etc. It is of utmost importance to organize training for officers/workers involved in its handling and management. In addition to the above, spillage of waste lubricating oil, etc can be collected and stored in the dedicated drum, and the storage area can be repaired/constructed as per the Guidelines. In addition to the above It has also been found that every dumper/machinery etc vendor has their own workshop, where a significant amount of waste lubricating oil etc. considered as hazardous waste, has been thrown/spilled. For better hazardous waste management at the project level, it is required to accommodate all vendors in demarcated cemented areas places, etc. and generated ETP sludge is being dumped with OB, without consulting with the UPPCB/CPCB. It is required to dispose of ETP sludge as per the CPCB guidelines.

**Not Complied**

XI. Monitoring of compliance of EC conditions may be submitted with third party audit every year.

As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the third-party audit by the team of ICFRE Dehradun was held in December '2021 and the report was received in Jan'23. Further, a third-party audit was carried out by the Institute for Environmental Management, Ranchi, Jharkhand on 28.05.2024 and the final report was submitted by the institute on 24.09.2024.

**Being Complied**

XII. Fund allocation for Corporate Environment Responsibility (CER) which is at least 1.5 times as per OM of 1st May 2018 may now be considered as 1.5 times of fund allocated on commitment made during public consultation process for incorporating

As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the expenditures incurred on these machines are tabulated below.

in EIA-EMP for deliberation of EAC and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's regional office.

| SN | Activity  | Financial Year                                | Expenditure incurred                    |
|----|---|---|---|
| 1  | Development of truck-mounted fog canon            | Procured in 2019-20 and currently operational | 43.54 lakhs                             |
| 2  | Development of vacuum based sweeping machine      | Procured in 2019-20 and currently operational | 53.71 Lakhs                             |
| 3  | Development of self-propel road sweeping machine  | Procured in 2020-21 and currently operational | 138 Lakhs                               |
| 4  | Development of additional truck-mounted fog canon | Hired in 2022-23                              | 51.88 Lakhs/Annun including diesel cost |

|   | For the year ended 31.03.2024 | For the year ended 31.03.2023 (Rs in crore) |
|---|-------------------------------|---|
| Power Expenses                              | 58.70                         | 58.33                                       |
| Repair and Maintenance                      | -                             | -   |
| Building                                    | 13.24                         | 11.82                                       |
| Plant and Machinery                         | 24.61                         | 27.78                                       |
| Others                                      | 0.99                          | 0.71  |
| Travelling Expenses                         | 0.95                          | 1.34  |
| Training Expenses                           | 0.01                          | 0.07  |
| Telephone and Internet                      | 0.11                          | 0.16  |
| Advertisement and Publicity                 | 0.22                          | 0.33  |
| Freight Charge                              | -                             | -   |
| Demurrage                                   | -                             | -   |
| Under Loading Charges                       | 1.21                          | 0.29  |
| Coal Sampling Charge                        | 3.98                          | 6.03  |
| Security Expenses                           | 12.90                         | 10.65                                       |
| Service Charge of CIL                       | 76.39                         | 59.99                                       |
| Legal Expenses                              | 0.03                          | -   |
| Consultancy Charge                          | -                             | -   |
| Consultancy Charge to CMPDIL                | 11.22                         | 9.08  |
| Loss on sale / Discard / Surveyed of Assets | 0.36                          | 0.04  |
| Auditor's Remuneration & Expenses           | -                             | -   |
| For Audit Fee                               | -                             | -   |
| For Taxation Matters                        | -                             | -   |
| For other Services                          | -                             | -   |
| For Reimbursement of Exps                   | -                             | -   |
| Internet & other Audit Expenses             | 0.29                          | 0.30  |
| Rehabilitation Charges                      | 9.45                          | 8.93  |
| Lease Rent & Hiring Charges                 | 9.31                          | 8.49  |

|                                   |        |        |
|-----------------------------------|--------|--------|
| Rates and Taxes                   | 2.99   | 2.69   |
| Insurance                         | 0.25   | 0.11   |
| Loss on exchange rate variance    | 0.49   | 0.30   |
| Rescue / Safety Expenses          | 0.58   | 1.05   |
| Siding Maintenance charge         | -      | -      |
| R & D and survey Expenses         | -      | -      |
| Envir.& Tree Plantation Expenses  | 4.66   | 3.94   |
| CSR Expenses                      | 4.32   | 5.43   |
| Donations Rewards & Grant         | -      | -      |
| Provisions                        | 0.09   | 0.71   |
| Write off (Net of pat provisions) |        |        |
| Miscellaneous Expenses            | 121.26 | 4.95   |
| Total                             | 358.61 | 223.52 |

Besides, above it is required to submit the expenditure incurred under CER to this office.

**Partially Complied**

**EC NO. J-11015/ 255 / 2006 - IA.II(M) dated 07.02.2024 EXPANSION of PROJECT (15 MTPA)**

|      |  |   |
|------|--|---|
| i.   | PP shall commission the additional Rapid Loading System (Silo) of 4.0 MTPA before December, 2024 in addition to the existing coal transportation facility (with 2 nos. of CHPs with Silo loading facility of 10.0 MTPA) having Merry Go-Round (MGR) arrangement. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that a work order for construction of CHP/ RLS of 04 MTPA capacity has been issued to M/s S.K. Samanta & Co. Pvt. Ltd. On 08.01.2024. Further, a site handover letter has been issued to M/s S.K. Samanta & Co. Pvt. Ltd. On 15.03.2024, with the date of start of work as 17.03.2024, The work of construction of the Rapid Loading System has been started and the remaining CHP of 04 MTPA and 06 MTPA is under operation. It is required to speed up the construction of Rapid Loading system.<br><b>Partially Complied</b>              |
| ii.  | PP shall use the mechanized system for 13.5 MTPA (i.e. -90% of 15MTPA) and for the rest 1.5 MTPA (i.e. ~10 % of 15MTPA) by road through automatic truck loading system linked with SILO arrangement. Accordingly, SPCB shall issue the CTO.                      | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs are equipped with 02 nos. of Coal Handling Plants (CHP) with a total dispatch capacity of 10 MTPA (04 MTPA + 06 MTPA), through which coal is being dispatched through Merry-Go-Round system (A derivative of rail transport). Further, coal is also being dispatched through Jhingurdah Wharfwall and Krishnshila CHP. Khadia Project is committed towards reduction in coal transport through road mode and in FY 2023-24, 13.70% reduction has been done in road dispatch in comparison with FY 2022-23.<br><b>Being Complied</b> |
| iii. | PP shall develop environmental lab with adequate environmental monitoring instrument/equipment and deploy qualified manpower in its mine office instead of using laboratory of consultant for regular monitoring and analysis activity shall be done by          | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that a centralised laboratory of CMPDIL is around 06 KM distance from Khadia OCP and regular sampling for air, water, noise etc. are being done through this  |

|                        | December, 2023.  | laboratory. Further, In house lab is available at ETP and STP of Khadia OCP, where sampling and monitoring are being done for basic water quality of effluent and treated water daily. To monitor air quality, CAAQMS is operational at Khadia OCP.<br><b>Being Complied</b>  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
|------------------------|--|---|--|-------------------------------|---|----------------|-------|-------|------------------------|---|---|----------|-------|-------|---------------------|-------|-------|--------|------|------|---------------------|------|------|-------------------|------|------|------------------------|------|------|
| IV.                    | PP shall protect/preserve 10 ha Sal nursery with a capacity of approximately 1.0 lakh nos. Sal saplings and a yearly minimum 10,000 saplings to be distributed among near villagers for afforestation purpose. The planted trees shall be geotagged and its status to be submitted to Ministry's Regional Office with six monthly report.                                  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have yet not developed 10 ha Sal nursery so far. It is required to take suitable action for the setting of Sal Nursery on a priority basis. As informed, for the purpose of development of Sal Nursery, site area has been identified and MoU with UP Forest Department is under finalisation.<br><b>Not Complied</b>   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| V.                     | PP shall obtain No objection certificate from Central Ground water authority for expanded capacity.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the application for obtaining NOC for expanded capacity, the application has been made to Central Ground Water Authority vide application no. 21-4/1269/MP/MIN/2022 on 19.03.2024.<br><b>Partially Complied</b>   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| VI.                    | PP to implement extra mitigation measures (such as installation of fog cannon, wheel washing facility, implementation of electric vehicle and others.) in order to reduce the pollution inside/outside the ML area in order to meet ambient air quality standards and a progressive report to be submitted to IRO, MoEF&CC.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs are equipped with 04 nos. of fixed fog cannons, 04 nos. of truck-mounted fog cannons. Besides, the construction of a wheel washing facility and procurement of electric vehicles has not been done so far. It is directed to take suitable action for the execution of the wheel washing system and procurement of electric vehicles on a priority basis.<br><b>Not Complied</b>  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| VII.                   | PP needs to submit the audited figures against the expenditure and activities to be conducted for environment mitigation measures and addressing the issues of public hearing through dedicated monitoring mechanism. The maintenance of all activities raised in earlier PH, shall be covered through recurring cost of Public Hearing, which will be part of CSR budget. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have submitted the audited figures against the expenditure and activities conducted for environment mitigation measures which include: Activities like medical camps, training to local people for skill development, construction of roads etc. are regularly being done through CSR activities.   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
|                        |  | <table border="1"> <thead> <tr> <th></th> <th>For the year ended 31.03.2024</th> <th>For the year ended 31.03.2023 (Rs in crore)</th> </tr> </thead> <tbody> <tr> <td>Power Expenses</td> <td>58.70</td> <td>58.33</td> </tr> <tr> <td>Repair and Maintenance</td> <td>-</td> <td>-</td> </tr> <tr> <td>Building</td> <td>13.24</td> <td>11.82</td> </tr> <tr> <td>Plant and Machinery</td> <td>24.61</td> <td>27.78</td> </tr> <tr> <td>Others</td> <td>0.99</td> <td>0.71</td> </tr> <tr> <td>Travelling Expenses</td> <td>0.95</td> <td>1.34</td> </tr> <tr> <td>Training Expenses</td> <td>0.01</td> <td>0.07</td> </tr> <tr> <td>Telephone and Internet</td> <td>0.11</td> <td>0.16</td> </tr> </tbody> </table> |  | For the year ended 31.03.2024 | For the year ended 31.03.2023 (Rs in crore) | Power Expenses | 58.70 | 58.33 | Repair and Maintenance | - | - | Building | 13.24 | 11.82 | Plant and Machinery | 24.61 | 27.78 | Others | 0.99 | 0.71 | Travelling Expenses | 0.95 | 1.34 | Training Expenses | 0.01 | 0.07 | Telephone and Internet | 0.11 | 0.16 |
|                        | For the year ended 31.03.2024  | For the year ended 31.03.2023 (Rs in crore)   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Power Expenses         | 58.70  | 58.33   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Repair and Maintenance | -  | -   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Building               | 13.24  | 11.82   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Plant and Machinery    | 24.61  | 27.78   |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Others                 | 0.99   | 0.71  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Travelling Expenses    | 0.95   | 1.34  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Training Expenses      | 0.01   | 0.07  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |
| Telephone and Internet | 0.11   | 0.16  |  |                               |   |                |       |       |                        |   |   |          |       |       |                     |       |       |        |      |      |                     |      |      |                   |      |      |                        |      |      |

|       |   |  |        |        |
|-------|---|--|--------|--------|
|       |   | Advertisement and Publicity  | 0.22   | 0.33   |
|       |   | Freight Charge   | -      | -      |
|       |   | Demurrage  | -      | -      |
|       |   | Under Loading Charges  | 1.21   | 0.29   |
|       |   | Coal Sampling Charge   | 3.98   | 6.03   |
|       |   | Security Expenses  | 12.90  | 10.65  |
|       |   | Service Charge of CIL  | 76.39  | 59.99  |
|       |   | Legal Expenses   | 0.03   | -      |
|       |   | Consultancy Charge   | -      | -      |
|       |   | Consultancy Charge to CMPDIL   | 11.22  | 9.08   |
|       |   | Loss on sale / Discard / Surveyed of Assets  | 0.36   | 0.04   |
|       |   | Auditor's Remuneration & Expenses  | -      | -      |
|       |   | For Audit Fee  | -      | -      |
|       |   | For Taxation Matters   | -      | -      |
|       |   | For other Services   | -      | -      |
|       |   | For Reimbursement of Exps  | -      | -      |
|       |   | Internet & other Audit Expenses  | 0.29   | 0.30   |
|       |   | Rehabilitation Charges   | 9.45   | 8.93   |
|       |   | Lease Rent & Hiring Charges  | 9.31   | 8.49   |
|       |   | Rates and Taxes  | 2.99   | 2.69   |
|       |   | Insurance  | 0.25   | 0.11   |
|       |   | Loss on exchange rate variance   | 0.49   | 0.30   |
|       |   | Rescue / Safety Expenses   | 0.58   | 1.05   |
|       |   | Siding Maintenance charge  | -      | -      |
|       |   | R & D and survey Expenses  | -      | -      |
|       |   | Envir.& Tree Plantation Expenses   | 4.66   | 3.94   |
|       |   | CSR Expenses   | 4.32   | 5.43   |
|       |   | Donations Rewards & Grant  | -      | -      |
|       |   | Provisions   | 0.09   | 0.71   |
|       |   | Write off (Net of pat provisions)  |        |        |
|       |   | Miscellaneous Expenses   | 121.26 | 4.95   |
|       |   | Total  | 358.61 | 223.52 |
|       |   | <b>Being Complied</b>  |        |        |
| VIII. | PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System." | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that a committee has been constituted for Public Grievance Redressal and Monitoring System and information regarding this has been published in 02 local newspapers of Singrauli District and 02 local newspapers in Sonebhadra District in Vernacular Language. Details of newspapers and date of publication is as detailed below. Information regarding this has also been submitted vide letter no. NCL/KHD/GM/Env./MOEF Bhopal/24-25/4244 to Western Regional office of MoEF&CC dated 20.04.2024 and KHD/GM/Env./MOEF UP/24-25/4245 dated 20.04.2024 to Central Regional office of |        |        |

|                   |   | MoEF&CC.  |                  |                     |                |            |               |            |             |            |                   |            |
|-------------------|---|---|------------------|---------------------|----------------|------------|---------------|------------|-------------|------------|-------------------|------------|
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| Newspaper(State)  | Date of publication   |   |                  |                     |                |            |               |            |             |            |                   |            |
| Amar Ujala(UP)    | 15.04.2024  |   |                  |                     |                |            |               |            |             |            |                   |            |
| Hindustan(UP)     | 15.04.2024  |   |                  |                     |                |            |               |            |             |            |                   |            |
| Patrika(MP)       | 15.04.2024  |   |                  |                     |                |            |               |            |             |            |                   |            |
| Dainik Jagran(MP) | 15.04.2024  |   |                  |                     |                |            |               |            |             |            |                   |            |
|                   |   | <b>Being Complied</b>   |                  |                     |                |            |               |            |             |            |                   |            |
| IX.               | PP shall submit status of audited report for progressive mine closure after commissioning of mine till date to IRO, MoEF&CC.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have submitted audited reports of progressive mine closure plans for the period 2010-11 to 2014-15 (Phase-1) and 2015-16 to 2019-20 (Phase-II) have been sent to Western Regional office of MoEF&CC vide letter no. NCL/KHD/ENV/MoEF-Bhopal/24-25/4296 dated 21.05.2024 & to Central Regional Office of MoEF&CC vide letter no. NCL/KHD/ENV/MoEF-UP/24-25/4295 dated 21.05.2024.  |                  |                     |                |            |               |            |             |            |                   |            |
|                   |   | <b>Being Complied</b>   |                  |                     |                |            |               |            |             |            |                   |            |
| X.                | PP shall start reclamation of the mine with combination of top soil and Fly ash with the development of grazing facility and other activities to be considered from the progressive mine closure plan.                  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that reclamation of the mine is regularly being done with topsoil. Khadia Project is an operative mine and for dumping of fly ash, a study was conducted through IIT-BHU, Varanasi. As per the report, As per results of the technical study: "It is technically not feasible to dump the fly ash in Mine dump due to geo mining conditions, high stripping ratio, and huge rate of OB removal and instability of dump during the rainy season in present condition. Besides, it has been informed that the further a study is also being done by CIMFR, Dhanbad in Nigahi OCP.                                |                  |                     |                |            |               |            |             |            |                   |            |
|                   |   | <b>Being Complied</b>   |                  |                     |                |            |               |            |             |            |                   |            |
| XI.               | PP shall fulfill the water requirement for agricultural purpose by creating artificial ponds and shall fulfil the drinking water requirement after treatment through dedicated well or alternate sources for villagers. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the PAs have developed artificial pond through CSR activities. One no. of pond has been provided at Gharsadi Village (Jawahar Nagar) and one pond has been deepened at Paraswar Choubey Village in FY 2017-18. Water from these ponds are being used for agriculture purposes also, by the local villagers. For drinking water, it is pertinent to mention here that local villages are being supplied water through "Namami Gange Swachh Jal Yojna" through the state Government. However, PAs has provided land free of cost for the construction of one no. of the overhead tank used for the scheme. |                  |                     |                |            |               |            |             |            |                   |            |
|                   |   | <b>Being Complied</b>   |                  |                     |                |            |               |            |             |            |                   |            |
| XII.              | Water storage ponds shall be constructed of   | As per the discussion held during the monitoring of the   |                  |                     |                |            |               |            |             |            |                   |            |

|   | appropriate depth in nearby village in collaboration with Gram Panchayat.   | project and report submitted by PAs, it has been stated that the PAs have developed artificial pond through CSR activities. One no. of pond has been provided at Gharsadi Village (Jawahar Nagar) and one pond has been deepened at Paraswar Choubey Village in FY 2017-18. Water from these ponds are being used for agriculture purposes also, by the local villagers. For drinking water, it is pertinent to mention here that local villages are being supplied water through "Namami Gange Swacch Jal Yojna" through the state Government. However, PAs has provided land free of cost for the construction of one no. of the overhead tank used for the scheme.<br><b>Being Complied</b>  |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
|---|---|---|--------------------|----------------------|--------------|-----|-----------|-----|-------------------|-----|---------------------------------|----|---|----|----------------------|----|
| XIII.                                   | PP shall provide Quarterly health check-up with free medical facilities for the local villager's surrounding to the 10 km buffer area along with the ambulance facilities.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that regular medical health camps are being organized by Khadia OCP. Ambulance facilities for the villagers have also been started in 2024-25, through which a health camp is being organized on a daily basis.<br><b>Being Complied</b>  |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| XIV.                                    | PP shall establish a technical training institute in the area to train the local youth for better employment. A report shall be prepared & submitted upon the status of the training session already conducted in order to provide livelihood and skill development to near-by villagers to make them employable. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that a proposal for establishing a technical training institute in the area to train the local youth for better employment is under approval. The status of training conducted and skill provided to nearby populations is as below.<br><table border="1"> <thead> <tr> <th>Training Programme</th> <th>No. of beneficiaries</th> </tr> </thead> <tbody> <tr> <td>Taxi Driving</td> <td>360</td> </tr> <tr> <td>Stitching</td> <td>200</td> </tr> <tr> <td>Computer Training</td> <td>125</td> </tr> <tr> <td>Beauticulture and hair dressing</td> <td>80</td> </tr> <tr> <td>Repair &amp; maintenance of home appliances</td> <td>75</td> </tr> <tr> <td>Banking &amp; Accounting</td> <td>70</td> </tr> </tbody> </table><br><b>Being Complied</b> | Training Programme | No. of beneficiaries | Taxi Driving | 360 | Stitching | 200 | Computer Training | 125 | Beauticulture and hair dressing | 80 | Repair & maintenance of home appliances | 75 | Banking & Accounting | 70 |
| Training Programme                      | No. of beneficiaries  |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Taxi Driving                            | 360   |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Stitching                               | 200   |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Computer Training                       | 125   |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Beauticulture and hair dressing         | 80  |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Repair & maintenance of home appliances | 75  |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| Banking & Accounting                    | 70  |   |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |
| XV.                                     | PP needs to submit the compliance of SoP issued by CPCB regarding dumping of mine void with fly ash.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that this mine is an operative mine. As stated, on dumping of fly ash in operative mine, a study is being done by CIMFR, Dhanbad in Nigahi OCP. Dumping of fly ash in operative mine shall be decided based on the outcome of the study. Besides, no fly ash is being  |                    |                      |              |     |           |     |                   |     |                                 |    |   |    |                      |    |

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|        |  | dumped so far.<br><b>Not Complied</b>  |
| xvi.   | The project proponent shall include development of solar parks, eco-friendly-parks, fish farming pond, picnic spot and sports compound in its Mine Closure Report. Further if possible, maximum possible area of quarry shall be brought upto original ground level and handover the land to Project affected Families.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the Mining plan and Mine Closure plan of 20 MTPA has been prepared and approved by NCL Board on 24.05.2024 and this plan includes development of solar parks, eco-friendly-parks, fish farming pond, picnic spot and sports compound. Besides, as on date solar parks has not been developed. Also as per Mining Plan, the quarry area shall be bought back to original ground level and will be completely planted.<br><b>Not Complied</b> |
| xvii.  | Proper garland drain and retaining wall should be made (if required) and same should be revived from time to time.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have constructed garland drain and retaining walls are regularly being made and will also be revived from time to time.<br><b>Being Complied</b>   |
| xviii. | PP to complete the tree plantation particularly fruit bearing tree along the village road and safety zone and submit its status to Ministry's Regional Office. The plantation shall also be planted along the Mine boundary and Mine pit. A detailed report with GIS images of every six months subsequently be submitted in every six monthly report to justify the adequate tree plantation. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that regular plantation is being done through UP Forest Department with fruit bearing trees along with other native species. In FY 2024-25, around 1.90 Ha area has been planted at Khadia Krishnashila Boundary. Also, approx 2.8 Ha plantation is to be done in FY 2024-25 along newly constructed CC road and mine boundary. Data on the plantation of fruit-bearing trees etc has not been provided so far.<br><b>Partially Complied</b>      |
| xix.   | PP shall increase number of fixed type sprinkling system (near to haul road, stockyard, transportation route etc.) across the mine lease area in order to arrest the dust coming out from the mining activities.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have fixed type sprinklers are operational at coal stockyard no. 1. Fixed sprinklers are further being installed on coal transportation road and administrative approval for the same has been obtained. Besides, PAs has equipped with 04 nos. of fixed fog cannons and 04 nos. of truck mounted fog cannons.<br><b>Being Complied</b>  |
| xx.    | PP shall install 100 m jet spray length in order to arrest the heavy air pollution on the roads and other dust generating points. More number of Fog cannons, Road sweeper and Mobile water sprinklers to be used on road.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have total 04 nos. of fixed fog cannons (100 m jet spray) have been installed at Khadia OCP. Besides this, 04 nos. of truck mounted fog cannons and 02 nos. of road sweeping machines are operational at Khadia OCP.<br><b>Being Complied</b>  |
| xxi.   | PP shall construct 25-sitting digital library in each village including the daily newspaper facility   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that activity for the purpose of construction of digital  |

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|        |   | library is currently under approval. Arrangements for providing books and newspapers have been made. A suitable room has been provided by Gram sabha of village chilkatand for establishing the library.<br><b>Not Complied</b>   |
| XXII.  | PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be submitted to IRO, MoEF&CC.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted a third-party audit by the team of ICFRE Dehradun has been held in December'2021 and report received in Jan'23. Further, a third-party audit was carried out by the Institute for Environmental Management, Ranchi, and Jharkhand on 28.05.2024 and final report was submitted by the institute on 24.09.2024.<br><b>Being Complied</b>  |
| XXIII. | The status of mine closure activities must be included in every six months' compliance report submitted to the state pollution control board and IRO.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the status of Mine Closure Activities for the period October 2023 to March 2024 has been submitted to this office.<br><b>Being Complied</b>   |
| XXIV.  | PP to maintain the topped haul road properly to minimize the dust emission. PP to also develop pucca roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the permanent road of the mine are either blacktopped or cement concrete has been done. In FY 2023-24, cement concreting of approx. 6.61 KM road has been completed. It has been found that major internal road has not been cemented/blacktopped so far. It is required speed up the construction of majority of internal roads on a priority basis, which helps to control dust emission, smooth transportation of coal, maintenance of vehicles etc., Besides, Pucca roads are also being developed within nearby villages through CSR activities like CC road has been provided at Chilkatand Village, Ambedkarnagar etc.<br><b>Partially Complied</b> |
| XXV.   | PP to install solar lights along the road used for the transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have yet not provided solar solar-mediated light systems on the road used for transportation of the coal so far. It is required to take necessary action on the execution of the solar light.<br><b>Not Complied</b>  |
| XXVI.  | PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have yet not constructed bio-toilet in study village. It is required to construct bio-toilet as early as possible.  |

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|                                   |  | <b>Not Complied</b>   |
| XXVII.                            | PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the in FY 2023-24, no such complaint has been received by Khadia OCP.<br><b>Being Complied</b>   |
| XXVIII.                           | PP shall explore at least 20% of the overall fleet of dumpers/trucks/other vehicles as electrical or CNG/LNG based for transportation of coal/OB etc.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have yet not introduced electrical or CNG/LNG-based vehicles used for transportation of the coal and OB at the project site.<br><b>Not Complied</b>   |
| XXIX.                             | PP shall conduct feasibility studies for the assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post-closure of mines in line with the Fly Ash Utilization Notification, 2021.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have yet not conducted the feasibility study for the utilization of fly ash with this mine.<br><b>Not Complied</b>  |
| XXX.                              | All the other terms and conditions of earlier EC dated 10.04.2007 (with Public Hearing), 23.03.2016, and 27.07.2022 shall also be complied.  | A detailed report of earlier EC has already been enclosed.  |
| <b>a) Statutory Compliance: -</b> |  |   |
| I.                                | The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PA have obtained PAs have obtained, 1305 Ha Forest Land (Khadia & Dudhichua combined) in UP State granted vide 8-298/87-FC dated 30/07/1990 and 180 Ha Forest Land in MP State granted vide 8-83/2005-FC dated 14/09/2010.<br><b>Being Complied</b>   |
| II.                               | The project proponent shall obtain clearance from the National Board for Wildlife, if Applicable.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that this condition is not applicable as there are non-endangered species at Khadia OCP, as per the preamble of EC.<br><b>Not Applicable</b>   |
| III.                              | The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area). | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that an Integrated Wildlife Management Plan of Singrauli region has been prepared by the Indian Institute of Forest Management, Bhopal which covers both MP and UP state of Singrauli region. Also, as per the recommendation of the plan, Rs. 21.34 Cr. has already been deposited in the CAMPA account by Dudhichua OCP, NCL. As per the report, there is no schedule-I species in the region.<br><b>Being Complied</b> |
| IV.                               | The project proponent shall obtain Consent to Establish/Operate under the provisions of Air  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found  |

|   | <p>(Prevention &amp; Control of Pollution) Act, 1981 and the Water (Prevention &amp; Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.</p> | <p>that PAs have obtained CTE for 15 MTPA capacity from MPPCB on 12.10.2022 vide consent no. CTE-56845 and from UPPCB on 02.10.2022 vide consent application no. 17415950. Additionally, PAs have also obtained CTO for 15 MTPA capacity has been obtained from MPPCB on 05.10.2023, vide consent no. AW-58998 with validity till 31.12.2024 and from UPPCB on 12.12.2022 vide consent no. 166971 with validity up to 31.12.2024.</p> <p><b>Being Complied</b></p>  |            |                  |                                     |   |   |   |
|---|---|---|------------|------------------|-------------------------------------|---|---|---|
| <p>V.</p>   | <p>The project proponent shall obtain the necessary permission from the Central Ground Water Authority.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have obtained CGWA NOC vide letter no. CGWA/NOC/MIN/ORIG/2023/19303. Also, application for renewal of the NOC has been submitted vide application no. 21-4/1269/MP/MIN/2022 on 19.03.2024.</p> <p><b>Being Complied</b></p>  |            |                  |                                     |   |   |   |
| <p>VI.</p>  | <p>Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous &amp; Other Waste Management Rules, 2016.</p>    | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the generated municipal solid waste from the township, is being addressed by the Solid Waste Management Rules, 2016 and Hazardous Wastes generated in the mines are being addressed in accordance to the Hazardous &amp; Other Waste Management Rules, 2016. Brief details of the Hazardous Wastes generated in the mine and their treatment methods are as given below:</p> <table border="1"> <thead> <tr> <th>Type of HW</th> <th>Mode of Disposal</th> </tr> </thead> <tbody> <tr> <td>Used or Spent Oil (Sch I, Cat. 5.1)</td> <td>Sold to Authorized Re Processors/Recycler</td> </tr> <tr> <td>Wastes or residues containing oil (Sch I, Cat. 5.2)</td> <td>Being disposed of through authorised disposal facility.</td> </tr> </tbody> </table> <p>However, it has been found that the hazardous waste handling and management is very pathetic on the project site. It seems all concerns involving its management are unfamiliar with the Hazardous waste authorization handling and its management Rules, Guidelines, etc. It is of utmost importance to organize training for officers/workers involved in its handling and management. In addition to the above, spillage of waste lubricating oil, etc can be collected and stored in the dedicated drum, and the storage area can be repaired/constructed as per the Guidelines. In addition to the above It has also been found that every dumper/machinery etc vendor has their own</p> | Type of HW | Mode of Disposal | Used or Spent Oil (Sch I, Cat. 5.1) | Sold to Authorized Re Processors/Recycler | Wastes or residues containing oil (Sch I, Cat. 5.2) | Being disposed of through authorised disposal facility. |
| Type of HW  | Mode of Disposal  |   |            |                  |                                     |   |   |   |
| Used or Spent Oil (Sch I, Cat. 5.1)                 | Sold to Authorized Re Processors/Recycler   |   |            |                  |                                     |   |   |   |
| Wastes or residues containing oil (Sch I, Cat. 5.2) | Being disposed of through authorised disposal facility.   |   |            |                  |                                     |   |   |   |

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|  |  | <p>workshop, where a significant amount of waste lubricating oil etc. considered as hazardous waste, has been thrown/spilled. For better hazardous waste management at the project level, it is required to accommodate all vendors in demarcated cemented areas places, etc. and generated ETP sludge is being dumped with OB, without consulting with the UPPCB/CPCB. It is required to dispose of ETP sludge as per the CPCB guidelines.</p> <p><b>Not Complied</b></p> |
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**(b) Air quality monitoring and preservation**

| <p>I.</p>                       | <p>Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.</p> | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have established Four ambient air quality monitoring stations already exist in the core zone and four in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and heavy metal monitoring: including Core zone (Substation(OB), Khadia area, Coal testing lab, Khadia area, Khadia CGM Office, Khadia STP) Buffer zone (IWSS office, Bina STP, Pump house of CWS colony, Kohroul village). Continuous Ambient Air Quality Monitoring Station (CAAQMS) has been established in Khadia residential colony with real-time display arrangement for the awareness of the general public. Above CAAQMS is in operation. Monitoring for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> along with SPM in the industrial area is done on a fortnightly basis, and monitoring for heavy metals such as Hg, As, Pb, Cr, Ni, Cd etc. are done at the frequency of six months. The above monitoring is being carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September 2000 and as amended from time to time by the CPCB and the data is regularly being reported to the Ministry/Regional Office and the CPCB/MPPCB/UPPCB.</p> <p><b>Being Complied</b></p> |                 |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |
|---------------------------------|---|---|-----------------|------------------|-------------------|-----------------|-----------------|---------------------------------|--|--|--|--|-------------------|-----|----|----|----|
| <p>II.</p>                      | <p>The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted third-party analysis of the Ambient Air Quality (AAQ) Report, which was conducted by Central Mine Planning &amp; Design Institute Limited (CMPDI) Dated 25.09.2024. As per the submitted analysis report data are found within the permissible limits.</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>PM<sub>10</sub></th> <th>PM<sub>2.5</sub></th> <th>SO<sub>2</sub></th> <th>NO<sub>x</sub></th> </tr> </thead> <tbody> <tr> <td colspan="5"><b>Stations: GM Office KHA3</b></td> </tr> <tr> <td>Quarterly Average</td> <td>101</td> <td>36</td> <td>30</td> <td>34</td> </tr> </tbody> </table>   | Particulars     | PM <sub>10</sub> | PM <sub>2.5</sub> | SO <sub>2</sub> | NO <sub>x</sub> | <b>Stations: GM Office KHA3</b> |  |  |  |  | Quarterly Average | 101 | 36 | 30 | 34 |
| Particulars                     | PM <sub>10</sub>  | PM <sub>2.5</sub>   | SO <sub>2</sub> | NO <sub>x</sub>  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |
| <b>Stations: GM Office KHA3</b> |   |   |                 |                  |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |
| Quarterly Average               | 101   | 36  | 30              | 34               |                   |                 |                 |                                 |  |  |  |  |                   |     |    |    |    |

|                                |  | <table border="1"> <thead> <tr> <th colspan="5">Stations: Khadia STP KHA4</th> </tr> </thead> <tbody> <tr> <td>Quarterly Average</td> <td>94</td> <td>34</td> <td>28</td> <td>32</td> </tr> <tr> <th colspan="5">Stations: IWSS Office KHA5</th> </tr> <tr> <td>Quarterly Average</td> <td>95</td> <td>35</td> <td>29</td> <td>32</td> </tr> <tr> <th colspan="5">Stations: Bina STP, BA3</th> </tr> <tr> <td>Quarterly Average</td> <td>82</td> <td>34</td> <td>27</td> <td>32</td> </tr> <tr> <th colspan="5">Stations: Indira Bhawan CWA2</th> </tr> <tr> <td>Quarterly Average</td> <td>97</td> <td>31</td> <td>31</td> <td>26</td> </tr> <tr> <th colspan="5">Stations: Kohroul Village KSA4</th> </tr> <tr> <td>Quarterly Average</td> <td>79</td> <td>26</td> <td>25</td> <td>31</td> </tr> </tbody> </table>  | Stations: Khadia STP KHA4 |    |  |  |  | Quarterly Average | 94 | 34 | 28 | 32 | Stations: IWSS Office KHA5 |  |  |  |  | Quarterly Average | 95 | 35 | 29 | 32 | Stations: Bina STP, BA3 |  |  |  |  | Quarterly Average | 82 | 34 | 27 | 32 | Stations: Indira Bhawan CWA2 |  |  |  |  | Quarterly Average | 97 | 31 | 31 | 26 | Stations: Kohroul Village KSA4 |  |  |  |  | Quarterly Average | 79 | 26 | 25 | 31 |
|--------------------------------|--|---|---------------------------|----|--|--|--|-------------------|----|----|----|----|----------------------------|--|--|--|--|-------------------|----|----|----|----|-------------------------|--|--|--|--|-------------------|----|----|----|----|------------------------------|--|--|--|--|-------------------|----|----|----|----|--------------------------------|--|--|--|--|-------------------|----|----|----|----|
| Stations: Khadia STP KHA4      |  |   |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Quarterly Average              | 94   | 34  | 28                        | 32 |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Stations: IWSS Office KHA5     |  |   |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Quarterly Average              | 95   | 35  | 29                        | 32 |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Stations: Bina STP, BA3        |  |   |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Quarterly Average              | 82   | 34  | 27                        | 32 |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Stations: Indira Bhawan CWA2   |  |   |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Quarterly Average              | 97   | 31  | 31                        | 26 |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Stations: Kohroul Village KSA4 |  |   |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| Quarterly Average              | 79   | 26  | 25                        | 31 |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |
| III.                           | <p>Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.</p> | <p><b>Being Complied</b></p> <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that Coal is transported via a closed belt conveyor system and, in certain cases, covered vehicles. Water tankers on the haul roads and automatic permanent sprinklers at the loading/unloading and transfer locations are used for routine water spraying to control of dust. Appropriate air pollution control measures are being undertaken to maintain ambient air quality. Section-wise measures for control of air pollution are given below:</p> <ul style="list-style-type: none"> <li>• Drills used in the mine are provided with a wet operating mechanism and/or provided with dust extractors.</li> <li>• Blast hole pattern is designed in such a way to limit ground vibration and dust generation.</li> <li>• Surface miners(02 numbers) are currently operational in Khadia OCP which are enabling to continue the mining of coal without drilling and blasting.</li> <li>• Blasting is usually done during the shift changeover period in day time when a minimum number of persons are present around the blast area.</li> <li>• Controlled blasting is being practiced with the use of delay detonators. Updated mitigate measures like the use of electronic detonators etc. are adopted for control of ground vibrations and to arrest the fly rocks and boulders</li> <li>• Restricting the blasting during the period of high wind conditions.</li> <li>• At regular intervals, water is sprayed on haul roads, service roads &amp; coal loading and unloading points.</li> </ul> |                           |    |  |  |  |                   |    |    |    |    |                            |  |  |  |  |                   |    |    |    |    |                         |  |  |  |  |                   |    |    |    |    |                              |  |  |  |  |                   |    |    |    |    |                                |  |  |  |  |                   |    |    |    |    |

|      |  |  |
|------|--|--|
|      |  | <ul style="list-style-type: none"> <li>Controlling the emission of exhaust fumes by regular maintenance of HEMM engines.</li> </ul> <p>Other measures includes: Water sprinkler system for dust control at crushing point and automatic water system in SILO, Proper ventilation systems (air exhaust fans, draft fans etc.) in dumper &amp; dozer repair shop and store, Provision of dust free HEMM operator's cabin, Efficient dust control through four numbers of Truck Mounted Mist Spray System, Four numbers of fixed type Mist Fog Cannon System and two numbers of Road Sweeping Machines, A thick green belt has been developed between mining area and the residential premises and also within and around the leasehold area, Regular monitoring is being also done.</p> <p><b>Being Complied</b></p> |
| IV.  | The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the transportation of coal is being done as per the provisions and route envisaged in the approved Mining Plan of Khadia OCP. Major portion of coal produced is transported through MGR/ Indian railway. A few quantity of coal is being transported through trucks covered with tarpaulin.   |
| V.   | Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC certificate from the authorized pollution testing centres.   | As per discussion held during monitoring of the project and report submitted by PAs, it has been stated that the vehicular emissions are kept under control by regular maintenance of vehicles. All used vehicle having valid PUC certificate. Major coal transport is made through MGR railway system. Sometimes vehicles are also used for transporting the mineral and are optimally loaded and kept covered.   |
| VI.  | Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the Coal stockpile/ crusher/ feeder and breaker material transfer points are provided with an automatic dust suppression system. Belt conveyors are fully covered to avoid airborne dust. All drills are wet-operated or fitted with dust extractors.  |
| VII. | Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have installed automatic water sprinklers at the SILO of the CHPs for controlling fugitive dust emissions. Belt conveyors installed from Receiving Pit to SILO are properly covered. Water sprinklers have been provided at the transfer points of the conveyor belts. Automatic water sprinklers have also been provided on the approach road in the CHP premises.  |

|  |  | Being Complied  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
|--|--|---|------|--------------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------|------|------|---|
| <b>(c) Water quality monitoring and preservation</b> |  |   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| I.   | The effluent discharge (mine wastewater, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25 <sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the effluent discharge (mine wastewater, workshop effluent, and CHP effluent) is being monitored by third party on regular basis.   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| II.  | The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.1 1 (M) dated 27 <sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the monitoring data is being uploaded on company's website and also displayed at the project site.<br><br><b>Complied</b>   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| III.   | Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that monitoring of the groundwater level is being carried out by a network of dug wells and piezometers in the core and buffer zone of the project. Monitoring for ground water level is being done by CMPDI at an interval of three months, i.e., four times in a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality, once a year, i.e., in May. Historical Water Level details of well no. KD-07, Khadia <table border="1"> <thead> <tr> <th>Year</th> <th>Pre-monsoon W.L in m.bgl</th> <th>Post – Monsoon W.L in m.bgl</th> </tr> </thead> <tbody> <tr><td>2015</td><td>2.38</td><td>0.98</td></tr> <tr><td>2016</td><td>1.48</td><td>0.63</td></tr> <tr><td>2017</td><td>1.18</td><td>0.78</td></tr> <tr><td>2018</td><td>1.25</td><td>0.7</td></tr> <tr><td>2019</td><td>1.35</td><td>0.35</td></tr> <tr><td>2020</td><td>0.95</td><td>0.55</td></tr> <tr><td>2021</td><td>0.85</td><td>0.65</td></tr> <tr><td>2022</td><td>1.2</td><td>0.2</td></tr> <tr><td>2023</td><td>1.05</td><td>0.95</td></tr> <tr><td>2024</td><td>1.35</td><td>-</td></tr> </tbody> </table> | Year | Pre-monsoon W.L in m.bgl | Post – Monsoon W.L in m.bgl | 2015 | 2.38 | 0.98 | 2016 | 1.48 | 0.63 | 2017 | 1.18 | 0.78 | 2018 | 1.25 | 0.7 | 2019 | 1.35 | 0.35 | 2020 | 0.95 | 0.55 | 2021 | 0.85 | 0.65 | 2022 | 1.2 | 0.2 | 2023 | 1.05 | 0.95 | 2024 | 1.35 | - |
| Year   | Pre-monsoon W.L in m.bgl   | Post – Monsoon W.L in m.bgl   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2015   | 2.38   | 0.98  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2016   | 1.48   | 0.63  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2017   | 1.18   | 0.78  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2018   | 1.25   | 0.7   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2019   | 1.35   | 0.35  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2020   | 0.95   | 0.55  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2021   | 0.85   | 0.65  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2022   | 1.2  | 0.2   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2023   | 1.05   | 0.95  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| 2024   | 1.35   | -   |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| IV.  | Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.   | As stated earlier, no water body is passing through the mining area of the Khadia Project. Also, mine is operating on zero discharge condition, i.e., no treated/untreated effluent is discharged into any outside water body. However, monitoring of the water quality of ETPs, STP, and Piezometers is being carried out regularly.<br><b>Not Applicable</b>  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |
| V.   | Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found  |      |                          |                             |      |      |      |      |      |      |      |      |      |      |      |     |      |      |      |      |      |      |      |      |      |      |     |     |      |      |      |      |      |   |

|                                    | shall be implemented for conservation and augmentation of ground water resources.   | that no groundwater, excluding mine water, is used for any mining operation. Water generated or accumulated during mining operations is stored and re-used for various mining activities.<br><b>Being Complied</b>  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
|------------------------------------|---|---|-----------|------------------|------------------|---------------|-------|------|----------------|------|------|----------------|----|------|---------------------|---|---|----------------|-------|------|---------------|------|-----|------------------------------------|-------|------|----------------|------|-----|----------------|--------|-------|----------------|-------|------|---------------------|---------|--------|----------------|-------|------|-----------------|-------|-----|
| VI.                                | Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have constructed catch Drains & siltation Ponds around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments into any outside water bodies, during the monsoon. Dump material is being consolidated/ compacted due to movement of heavy dumpers. Accumulation of water over dumps is avoided by providing an inward slope on the haul road between two benches, so that runoff water can be diverted along the toe, not through the slope. Water so collected from the individual benches is diverted into the garland drains at the bottom of the dump. The drains/ ponds so constructed are being regularly de-silted, particularly before the onset of monsoon, and maintained properly.<br><b>Being Complied</b>  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| VII.                               | Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/ water bodies.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the mine sump is designed in such a way that an adequate retention period is available for the proper settling of silt material. The water so collected in the sumps is utilized for dust suppression, green belt development, and other industrial uses. Dimension of the retaining wall is kept between 02 m to 04 m.<br><b>Being Complied</b>   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| VIII.                              | Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).  | As we know the mine workings area on hilly terrain. Mine & rainwater are collected in sufficient capacity in the mine sump for groundwater recharge. The rainwater harvesting is being done at 07 places including the administrative building (GM office). Sufficient numbers of hand pumps in nearby villages (Ambedkar Nagar, Sabji Market, Khadia village etc) have been provided. Third-party monitoring of groundwater quality and level has been done by an accredited laboratory.<br><table border="1"> <thead> <tr> <th>Parameter</th> <th>Sampling Station</th> <th>Detection Limits</th> </tr> </thead> <tbody> <tr> <td>B in mg/l,Max</td> <td>&lt;0.20</td> <td>0.20</td> </tr> <tr> <td>Ca in mg/l,Max</td> <td>20.8</td> <td>1.60</td> </tr> <tr> <td>Cl in mg/l,Max</td> <td>20</td> <td>2.00</td> </tr> <tr> <td>Colour, Hazen Units</td> <td>1</td> <td>1</td> </tr> <tr> <td>Cu in mg/l,Max</td> <td>&lt;0.02</td> <td>0.02</td> </tr> <tr> <td>F in mg/l,Max</td> <td>0.35</td> <td>0.2</td> </tr> <tr> <td>Free Residual Chlorine in mg/l,Max</td> <td>&lt;0.04</td> <td>0.04</td> </tr> <tr> <td>Fe in mg/l,Max</td> <td>&lt;0.2</td> <td>0.2</td> </tr> <tr> <td>Pb in mg/l,Max</td> <td>&lt;0.001</td> <td>0.001</td> </tr> <tr> <td>Mn in mg/l,Max</td> <td>&lt;0.02</td> <td>0.02</td> </tr> <tr> <td>Mercury in mg/l,Max</td> <td>&lt;0.0004</td> <td>0.0004</td> </tr> <tr> <td>Ni in mg/l,Max</td> <td>&lt;0.02</td> <td>0.02</td> </tr> <tr> <td>NO3 in mg/l,Max</td> <td>&lt;0.05</td> <td>0.5</td> </tr> </tbody> </table> | Parameter | Sampling Station | Detection Limits | B in mg/l,Max | <0.20 | 0.20 | Ca in mg/l,Max | 20.8 | 1.60 | Cl in mg/l,Max | 20 | 2.00 | Colour, Hazen Units | 1 | 1 | Cu in mg/l,Max | <0.02 | 0.02 | F in mg/l,Max | 0.35 | 0.2 | Free Residual Chlorine in mg/l,Max | <0.04 | 0.04 | Fe in mg/l,Max | <0.2 | 0.2 | Pb in mg/l,Max | <0.001 | 0.001 | Mn in mg/l,Max | <0.02 | 0.02 | Mercury in mg/l,Max | <0.0004 | 0.0004 | Ni in mg/l,Max | <0.02 | 0.02 | NO3 in mg/l,Max | <0.05 | 0.5 |
| Parameter                          | Sampling Station  | Detection Limits  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| B in mg/l,Max                      | <0.20   | 0.20  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Ca in mg/l,Max                     | 20.8  | 1.60  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Cl in mg/l,Max                     | 20  | 2.00  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Colour, Hazen Units                | 1   | 1   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Cu in mg/l,Max                     | <0.02   | 0.02  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| F in mg/l,Max                      | 0.35  | 0.2   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Free Residual Chlorine in mg/l,Max | <0.04   | 0.04  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Fe in mg/l,Max                     | <0.2  | 0.2   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Pb in mg/l,Max                     | <0.001  | 0.001   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Mn in mg/l,Max                     | <0.02   | 0.02  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Mercury in mg/l,Max                | <0.0004   | 0.0004  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| Ni in mg/l,Max                     | <0.02   | 0.02  |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |
| NO3 in mg/l,Max                    | <0.05   | 0.5   |           |                  |                  |               |       |      |                |      |      |                |    |      |                     |   |   |                |       |      |               |      |     |                                    |       |      |                |      |     |                |        |       |                |       |      |                     |         |        |                |       |      |                 |       |     |

|     |  |   | Odour                              | Agreeable | Qualitative |
|-----|--|---|------------------------------------|-----------|-------------|
|     |  |   | pH Value                           | 7.45      | 0.01        |
|     |  |   | Phenolic Compounds in mg/l, Max    | <0.001    | 0.001       |
|     |  |   | Se in mg/l,Max                     | <0.0005   | 0.0005      |
|     |  |   | SO4 in mg/l,Max                    | 39.05     | 10          |
|     |  |   | CaCO3 in mg/l,Max                  | 52        | 4.00        |
|     |  |   | As in mg/l,Max                     | >0.002    | 0.002       |
|     |  |   | Cr in mg/l,Max                     | <0.002    | 0.002       |
|     |  |   | Total Dissolved Solids in mg/l,Max | 148       | 25.00       |
|     |  |   | CaCO3 in mg/l,Max                  | 108       | 4.00        |
|     |  |   | Turbidity ,NTU ,Max                | 1.0       | 0.1         |
|     |  |   | Zn in mg/l,Max                     | 0.14      | 0.1         |
|     |  |   | Total Coliforms (MPN)              | -         | Nil         |
|     |  |   | <b>Being Complied</b>              |           |             |
| IX. | Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs having Effluent Treatment Plant (38.4 MLD) in Khadia mine, which is found working during monitoring. Workshop, Mine water and CHP waste water are being treated at ETP and the treated water is being reused in mine for the purpose of dust suppression and green belt development. However, domestic sewage is being treated in a Sewage Treatment Plant (STP) of capacity 1.5 MLD installed inside the residential colony of the project. Monitoring of the treated effluent is being done on regular basis. | <b>Being Complied</b>              |           |             |
| X.  | The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that water pumped out from the mine, after siltation, is being utilized for various industrial purposes like dust suppression on Haul Roads, loading and unloading points, firefighting, green belt development, etc. The drains are being regularly de-silted, particularly after the monsoon, and maintained properly.   | <b>Being Complied</b>              |           |             |
|     | The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that surface drainage plans including surface water conservation plan for the area of influence, have been prepared and incorporated in the EIA-EMP report and the same is being implemented. No major Nalla/ Stream flows through the mining area which requires diversion. To prevent any danger against the inrush of surface water into the mine, garland drains are being constructed regularly with the advancement of the mine, as per the approved Mining Plan.  | <b>Being Complied</b>              |           |             |
|     | The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A rivarine/riparian ecosystem conservation and   | As stated earlier, there is no river system up to a distance of 5 km from the Khadia OCP.   |                                    |           |             |

| <p>management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.</p>  | <p><b>Not Applicable</b></p>   |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
|---|--|-------------------|----------|-------------------|----------|------------|---------------------------------------|--|--|--|--|---|------------|------------|------|------|---------------------------------------|--|--|--|--|---|------------|------------|------|------|---|--|--|--|--|---|------------|------------|------|------|------------------------------------|--|--|--|--|----|-------------|------------|------|------|
| <p><b>(d) Noise and Vibration monitoring and prevention</b></p>   |  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <p>I. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.</p> | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have taken following measures are taken for control of noise levels in the work environment including blasting is done during shift changeover period when all the manpower (except those involved in the blasting operation) is evacuated from the working area. Even the blasting manpower operates from beyond 500m radial distance of the blasting site. New technologies such as electronic detonators is adopted for reducing the noise and ground vibration effect of blasting, Sound proof cabins are provided in, drills, draglines, dumpers etc. Besides, Personal Protective Equipment's (PPEs) like ear plugs/ muffs are provided to the workers engaged in areas like drilling, blasting, dozing, other HEMMs etc. Regular maintenance and lubrication of HEMMs are ensured. Signage and warning are provided at appropriate places. Adequate awareness programme are being conducted and usage of above accessories is being monitored regularly.</p> <p><b>Being Complied</b></p>  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <p>II. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.</p>   | <p>As per discussion held during monitoring of the project and report submitted by PAs, it has been found that PAs are using controlled blasting with use of delay detonators in between 01:00 PM to 02:00 PM. The ground vibrations are regularly monitored and kept controlled. Fly rocks are checked and blasting shelters are used.</p> <p><b>Being Complied</b></p>   |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <p>III. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted third-party monitoring of the noise level. As per the submitted analysis report data are found within the permissible limits.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Zone</th> <th>Date of recording</th> <th>Day Time</th> <th>Night Time</th> </tr> </thead> <tbody> <tr> <td colspan="5"><b>Station Name: Mine Site – KHN1</b></td> </tr> <tr> <td>1</td> <td>Industrial</td> <td>20.09.2024</td> <td>69.7</td> <td>60.4</td> </tr> <tr> <td colspan="5"><b>Station Name: OB W/Shop – KHN2</b></td> </tr> <tr> <td>1</td> <td>Industrial</td> <td>20.09.2024</td> <td>72.8</td> <td>60.1</td> </tr> <tr> <td colspan="5"><b>Station Name: Coal W/Shop – KHN3</b></td> </tr> <tr> <td>1</td> <td>Industrial</td> <td>18.09.2024</td> <td>72.0</td> <td>61.3</td> </tr> <tr> <td colspan="5"><b>Station Name: Colony – KHN4</b></td> </tr> <tr> <td>1.</td> <td>Residential</td> <td>20.09.2024</td> <td>47.4</td> <td>39.0</td> </tr> </tbody> </table> <p><b>Being Complied.</b></p> | S. No             | Zone     | Date of recording | Day Time | Night Time | <b>Station Name: Mine Site – KHN1</b> |  |  |  |  | 1 | Industrial | 20.09.2024 | 69.7 | 60.4 | <b>Station Name: OB W/Shop – KHN2</b> |  |  |  |  | 1 | Industrial | 20.09.2024 | 72.8 | 60.1 | <b>Station Name: Coal W/Shop – KHN3</b> |  |  |  |  | 1 | Industrial | 18.09.2024 | 72.0 | 61.3 | <b>Station Name: Colony – KHN4</b> |  |  |  |  | 1. | Residential | 20.09.2024 | 47.4 | 39.0 |
| S. No   | Zone   | Date of recording | Day Time | Night Time        |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <b>Station Name: Mine Site – KHN1</b>   |  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| 1   | Industrial   | 20.09.2024        | 69.7     | 60.4              |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <b>Station Name: OB W/Shop – KHN2</b>   |  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| 1   | Industrial   | 20.09.2024        | 72.8     | 60.1              |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <b>Station Name: Coal W/Shop – KHN3</b>   |  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| 1   | Industrial   | 18.09.2024        | 72.0     | 61.3              |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| <b>Station Name: Colony – KHN4</b>  |  |                   |          |                   |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |
| 1.  | Residential  | 20.09.2024        | 47.4     | 39.0              |          |            |                                       |  |  |  |  |   |            |            |      |      |                                       |  |  |  |  |   |            |            |      |      |   |  |  |  |  |   |            |            |      |      |                                    |  |  |  |  |    |             |            |      |      |

| Mining plane         |   |   |
|----------------------|---|---|
| I.                   | Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the mining is being done under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.<br><b>Being Complied</b>  |
| II.                  | Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that mining is being done abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).<br><b>Being Complied</b>   |
| III.                 | No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.  | As per the discussion held during the monitoring of the project and report submitted by PAs. As stated earlier the PAs have obtained, 1305 Ha Forest Land (Khadia & Dudhichua combined) in UP State granted vide 8-298/87-FC dated 30/07/1990 and 180 Ha Forest Land in MP State granted vide 8-83/2005-FC dated 14/09/2010.<br><b>Being Complied</b> |
| IV.                  | Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that PAs have taken various measures for controlling the energy, replacing the old lights with LED, use of capacitor banks, using star-rated ACs, time switches, and other electrical appliances.<br><b>Being Complied</b>            |
| (f) Land Reclamation |   |   |
| I.                   | Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted a digital survey of the entire leasehold area/core zone using a Satellite Remote Sensing survey being done in 2023 by CMPDIL.<br><b>Being Complied</b>   |
| II.                  | The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for | As per the discussion held during the monitoring of the project and report submitted by PAs. PAs have assured to comply the Mine Closure Plan, at the end of the mine.<br><b>Assured to Comply</b>  |

|      |   |   |
|------|---|---|
|      | Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.  |   |
| III. | The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.   | As per discussion held during monitoring of the project and report submitted by PAs, it has been mentioned in the EC that the total of 1255.72 Mm <sup>3</sup> of OB shall be stacked at earmarked sites of external dump (258 ha) and internal dump (808 ha.) The height and width of benches in OB dumps are maintained within permissible limits and wherever possible, established limits with plantation. It has been stated that the external as well as internal dumps have not achieved its projected height. Back filling and concurrent reclamation is a continuous process. Approx. 161.5 Ha OB dump area (56 Ha internal and 105.5 Ha external) has been reclaimed up-to 30.09.2021 by plantation through UP Forest department. The ultimate slope of the dump will not exceed 28°. As informed, OB Dumping in M.P. state has not achieved final height. In U.P. state, total 21,39,655 sapling (Native species) have been planted at Khadia Project from 1987-88 to Sept'21 through the UP Forest Department, Renukoot forest division. PAs have yet not developed 3-tier planation on road side. Management of OB dump is not up to the mark. Density of the plantation in various patches of OB need to re-check, and vacant area will full filled by planting more plant species for proper reclamation of OB.<br><b>Partially complied</b> |
| IV.  | Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB. | As stated that the scientific study has been completed by IIT BHU which has suggested:<br><i>"It is technically not feasible to dump the fly ash in mine dump due to geo mining conditions, high stripping ratio, huge rate of OB removal, huge catchment area, unstable slope in water conditions and Factor of Safety."</i> Additionally, CSIR CIMFR Dhanbad has also been engaged, which is conducting a study on the feasibility aspects of fly ash filling based on the actual field trials in Nigahi area of NCL.<br>Besides, no such development has been observed during the monitoring of the project. It is required to take suitable action on the use of fly ash as an external dump in the mine.<br><b>Not Complied</b>  |
| V.   | Further, it may be ensured that as per the time   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated   |

|               |   |   |
|---------------|---|---|
|               | <p>schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.</p> | <p>that the removed top soil is being spread over the dump slopes for further reclamation in the monsoon season. In case, the concurrent use of top soil is not possible then, top soil is being stored temporarily and with scientific management. Vegetation on overburden dump is being grown regularly through UP Forest Department with 04 years maintenance so that vegetation becomes self-sustaining. Excavated area is regularly being backfilled. It is required to strengthen the green cover developed on OB dump by planting more native plant species. It has been observed that the various non-native plants has also been planted on the OB dump for biological reclamation. It is required to stick with native species for better biologically reclamation of the OB dump only.</p> <p><b>Partially Complied</b></p> |
| VI.           | <p>The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.</p>   | <p>Not applicable, since no grazing land is involved in the core zone of the project.</p> <p><b>Not Applicable</b></p>  |
| g) Green Belt |   |   |
| I.            | <p>The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that there are no endangered/ endemic flora/ fauna species in the study area. If there is any endangered species of flora/ fauna founds in future, its protection will be ensured in consultation with the state forest department.</p> <p><b>Being Complied</b></p>   |
| II.           | <p>Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PAs have yet not developed 3-tier planation of width not less than 7.5 meter on all along the boundary of the project. Only small patch of boundary (southern to east) area has been planted so far. Besides, it has been found that the both the side of major approach road and coal transportation road are still vacant. It is required to take necessary action for the development of the three tier planation all along the boundary of the lease and both the side of the major approach road and coal transportation road shall also be cover with thick green belt for minimisation of the dust emission and</p>   |

|   |   |   |
|---|---|---|
|   |   | sequestration of the CO <sub>2</sub> emitted by the vehicles used for the transportation. Besides, in township is located over an area of 86 ha further SW of the mine and south of the PWD road. The area is well afforested with mixed native tree species together with few exotic species. Both single/ multi-row planting along the avenue areas and block plantation on vacant land has been planted in the colony/township area. Apart from this, an area of 7.0 ha has been developed as an ecological park named 'Nandan-kanan' located close to the administrative buildings.<br><b>Partially Complied</b>  |
| <b>(h) Public Hearing and Human health issues</b> |   |   |
| I.  | Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that all locations of mine area, are illuminated, as per the DGMS standards and monitoring is being done, as per the DGMS guidelines.<br><b>Being Complied</b>   |
| II.   | The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted Initial and Periodic Medical Examination for all the employees including workers, in a phased manner. As informed, a periodic medical Examination is being done every five years as per Coal Mines Regulations, which ensures a health check-up of 20% of the personnel every year. Besides this, a work order has been issued to M/s SMHRI Occupational Health Services Private Limited for conducting health check-ups of 130 Personnel vide GeM Contract no. GEMC-511687722436596 dated 25.04.2024 and health check-up has been completed.<br><b>Being Complied</b> |
| III.  | Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that dust masks have been provided to personnel working in mining areas. Adequate training and information on safety and health aspects are given through initial training, refresher training special training programs etc. Besides, it has been found that none of the workers were using dust masks. It is of utmost important to ensure the use of dust masks for the workers working in the core area.<br><b>Not Complied</b>   |
| IV.   | Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the budgetary provision made for addressable of the commitment made during public hearing has been completed. Also, land oustees have been compensated as  |

|   | with budgetary provisions during the public hearing. Land outsees shall be compensated as per the norms laid down in the R&R policy of the Company/State Government/ Central Government, as applicable.  | per R&R policy of Coal India Limited.<br><b>Being Complied</b>   |                      |          |                |                      |  |  |  |  |
|---|--|--|----------------------|----------|----------------|----------------------|--|--|--|--|
| V.  | The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are part of mine lease areas or habitations and villages are surrounded by the mine lease area.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that mitigation measures as provided in Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area' are being followed.<br><b>Being Complied</b>  |                      |          |                |                      |  |  |  |  |
| <b>(i) Corporate Environmental Responsibility</b> |  |  |                      |          |                |                      |  |  |  |  |
| I.  | The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions. The company shall have defined system of reporting any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions and/or shareholders/stake holders. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that NCL has a well-laid-down environmental policy duly approved by the Board of Directors of CIL and also by the Board of Directors of NCL. The company has a defined system of reporting at the Project and Headquarter level, in case of any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/ conditions.<br><b>Being Complied</b>  |                      |          |                |                      |  |  |  |  |
| II.   | A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.   | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs are having dedicated Environmental Management Cell (EMC) is headed by the Staff Officer (Mining) who is directly reporting to the General Manager. Khadia Project At Northern Coalfields Limited H.Qtrs. as with responsibility and accountability to ensure compliance of EC conditions.<br><b>Being Complied</b>   |                      |          |                |                      |  |  |  |  |
| III.  | Action plan for implementing EMP and environmental conditions along with the responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year-wise funds earmarked for environmental protection measures shall be kept in separate accounts and not to be diverted for any other purpose. Year-wise progress of implementation of action plan shall be reported to   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that Funds earmarked for environmental protection measures are kept under separate head and are not diverted for other purpose. In FY 2023-24, total 7.75 Crore Rs. Have been spent by Khadia Area. Besides, the expenditures incurred on these machines are tabulated below.<br><table border="1"> <thead> <tr> <th>SN</th> <th>Activity</th> <th>Financial Year</th> <th>Expenditure incurred</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | SN                   | Activity | Financial Year | Expenditure incurred |  |  |  |  |
| SN  | Activity   | Financial Year   | Expenditure incurred |          |                |                      |  |  |  |  |
|   |  |  |                      |          |                |                      |  |  |  |  |

the Ministry/Regional Office along with the Six Monthly Compliance Report.

|   |   |   |  |
|---|---|---|--|
| 1 | Development of truck-mounted fog canon            | Procured in 2019-20 and currently operational | 43.54 lakhs                              |
| 2 | Development of vacuum based sweeping machine      | Procured in 2019-20 and currently operational | 53.71 Lakhs                              |
| 3 | Development of self-propel road sweeping machine  | Procured in 2020-21 and currently operational | 138 Lakhs                                |
| 4 | Development of additional truck-mounted fog canon | Hired in 2022-23                              | 51.88 Lakhs/ Annum including diesel cost |

|   | For the year ended 31.03.2024 | For the year ended 31.03.2023 (Rs in crore) |
|---|-------------------------------|---|
| Power Expenses                              | 58.70                         | 58.33                                       |
| Repair and Maintenance                      | -                             | -   |
| Building                                    | 13.24                         | 11.82                                       |
| Plant and Machinery                         | 24.61                         | 27.78                                       |
| Others                                      | 0.99                          | 0.71  |
| Travelling Expenses                         | 0.95                          | 1.34  |
| Training Expenses                           | 0.01                          | 0.07  |
| Telephone and Internet                      | 0.11                          | 0.16  |
| Advertisement and Publicity                 | 0.22                          | 0.33  |
| Freight Charge                              | -                             | -   |
| Demurrage                                   | -                             | -   |
| Under Loading Charges                       | 1.21                          | 0.29  |
| Coal Sampling Charge                        | 3.98                          | 6.03  |
| Security Expenses                           | 12.90                         | 10.65                                       |
| Service Charge of CIL                       | 76.39                         | 59.99                                       |
| Legal Expenses                              | 0.03                          | -   |
| Consultancy Charge                          | -                             | -   |
| Consultancy Charge to CMPDIL                | 11.22                         | 9.08  |
| Loss on sale / Discard / Surveyed of Assets | 0.36                          | 0.04  |
| Auditor's Remuneration & Expenses           | -                             | -   |
| For Audit Fee                               | -                             | -   |
| For Taxation Matters                        | -                             | -   |
| For other Services                          | -                             | -   |
| For Reimbursement of Exps                   | -                             | -   |
| Internet & other Audit Expenses             | 0.29                          | 0.30  |
| Rehabilitation Charges                      | 9.45                          | 8.93  |
| Lease Rent & Hiring Charges                 | 9.31                          | 8.49  |
| Rates and Taxes                             | 2.99                          | 2.69  |
| Insurance                                   | 0.25                          | 0.11  |
| Loss on exchange rate variance              | 0.49                          | 0.30  |

|                                   |   | <table border="1"> <tr> <td>Rescue / Safety Expenses</td> <td>0.58</td> <td>1.05</td> </tr> <tr> <td>Siding Maintenance charge</td> <td>-</td> <td>-</td> </tr> <tr> <td>R &amp; D and survey Expenses</td> <td>-</td> <td>-</td> </tr> <tr> <td>Envir.&amp; Tree Plantation Expenses</td> <td>4.66</td> <td>3.94</td> </tr> <tr> <td>CSR Expenses</td> <td>4.32</td> <td>5.43</td> </tr> <tr> <td>Donations Rewards &amp; Grant</td> <td>-</td> <td>-</td> </tr> <tr> <td>Provisions</td> <td>0.09</td> <td>0.71</td> </tr> <tr> <td>Write off (Net of pat provisions)</td> <td></td> <td></td> </tr> <tr> <td>Miscellaneous Expenses</td> <td>121.26</td> <td>4.95</td> </tr> <tr> <td>Total</td> <td>358.61</td> <td>223.52</td> </tr> </table>  | Rescue / Safety Expenses | 0.58             | 1.05                | Siding Maintenance charge | -       | -          | R & D and survey Expenses | -             | -          | Envir.& Tree Plantation Expenses | 4.66            | 3.94       | CSR Expenses | 4.32               | 5.43       | Donations Rewards & Grant | - | - | Provisions | 0.09 | 0.71 | Write off (Net of pat provisions) |  |  | Miscellaneous Expenses | 121.26 | 4.95 | Total | 358.61 | 223.52 |
|-----------------------------------|---|---|--------------------------|------------------|---------------------|---------------------------|---------|------------|---------------------------|---------------|------------|----------------------------------|-----------------|------------|--------------|--------------------|------------|---------------------------|---|---|------------|------|------|-----------------------------------|--|--|------------------------|--------|------|-------|--------|--------|
| Rescue / Safety Expenses          | 0.58  | 1.05  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Siding Maintenance charge         | -   | -   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| R & D and survey Expenses         | -   | -   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Envir.& Tree Plantation Expenses  | 4.66  | 3.94  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| CSR Expenses                      | 4.32  | 5.43  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Donations Rewards & Grant         | -   | -   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Provisions                        | 0.09  | 0.71  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Write off (Net of pat provisions) |   |   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Miscellaneous Expenses            | 121.26  | 4.95  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| Total                             | 358.61  | 223.52  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
|                                   |   | <b>Partially Complied</b>   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| IV.                               | Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.   | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs have conducted a third-party audit by the team of ICFRE Dehradun has been held in December'2021, and the report received in Jan'23. Further, a third-party audit was carried out by the Institute for Environmental Management, Ranchi, Jharkhand on 28.05.2024 and the final report was submitted by the institute on 24.09.2024.<br><b>Being Complied</b>   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| <b>(j) Miscellaneous</b>          |   |   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
|                                   | The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that the PP has made public the Environmental Clearance by advertising in 02 local newspapers of Singrauli District and 02 local newspapers in Sonebhadra District in Vernacular Language. Details of newspapers and date of publication is as detailed below. <table border="1"> <thead> <tr> <th>S No.</th> <th>Newspaper(State)</th> <th>Date of publication</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Aaj(UP)</td> <td>10.02.2024</td> </tr> <tr> <td>2</td> <td>Hindustan(UP)</td> <td>10.02.2024</td> </tr> <tr> <td>3</td> <td>Raj Express(MP)</td> <td>10.02.2024</td> </tr> <tr> <td>4</td> <td>Dainik Bhaskar(MP)</td> <td>10.02.2024</td> </tr> </tbody> </table> | S No.                    | Newspaper(State) | Date of publication | 1                         | Aaj(UP) | 10.02.2024 | 2                         | Hindustan(UP) | 10.02.2024 | 3                                | Raj Express(MP) | 10.02.2024 | 4            | Dainik Bhaskar(MP) | 10.02.2024 |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| S No.                             | Newspaper(State)  | Date of publication   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| 1                                 | Aaj(UP)   | 10.02.2024  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| 2                                 | Hindustan(UP)   | 10.02.2024  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| 3                                 | Raj Express(MP)   | 10.02.2024  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
| 4                                 | Dainik Bhaskar(MP)  | 10.02.2024  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
|                                   | The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the copy of EC letter has already been provided to offices of District Magistrate/ Collector in UP and MP state wide letter no. 4166 & 4167 respectively dated 13.02.2024. The copy of EC letter has been District Industrial Officer in both MP and UP vide letter no. 4162 & 4163 respectively dated 13.02.2024.<br><b>Complied</b>  |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |
|                                   | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on  | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on   |                          |                  |                     |                           |         |            |                           |               |            |                                  |                 |            |              |                    |            |                           |   |   |            |      |      |                                   |  |  |                        |        |      |       |        |        |

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|--|---|--|
|  | their website and update the same on half-yearly basis.   | company website<br><a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a><br><b>Being Complied</b>  |
|  | The project proponent shall monitor the criteria pollutants level namely; PM <sub>10</sub> , SO <sub>2</sub> , NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.   | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on company website<br><a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a><br><b>Being Complied</b>  |
|  | The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.   | As per discussion held during monitoring of the project and report submitted by PAs, it has been found that the PAs has been uploaded EC and six monthly compliance report, monitoring report, Environmental statement on company website<br><a href="https://nclcil.in/detail/890185/environment-policy-and-management">https://nclcil.in/detail/890185/environment-policy-and-management</a> . Besides, regular submission of the Environmental statement to this office.<br><b>Being Complied</b>   |
|  | The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'. | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that mitigation measures as provided in Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area' are being followed.<br><b>Being Complied</b>   |
|  | The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.  | As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that environmental statement for each financial year ending 31st March in Form-V is regularly submitted by the project to MPPCB, UPPCB and MoEF&CC, Bhopal and Lucknow as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently. The environmental statement for financial year ending 31st March 2023 has been submitted, vide no. KHD/GM/ENV/MOEF UP/24-25/4493 to Central regional office of MoEF&CC, Lucknow on 27.09.2024 & to the Western regional office of MoEF&CC, Bhopal vide letter no. NCL/KHD/ENV/MOEF BHOPAL/24-25/4492 on 27.09.2024.<br><b>Being Complied</b> |
|  | The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.  | <b>Complied</b>  |

|  |  |
|--|--|
| <p>The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs are complying with the stipulations made by the State Pollution Control Board and the State Government.<br/><b>Being Complied</b></p>   |
| <p>The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.</p>   | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs agree with the condition and complying the commitments and recommendations made in the EIA/EMP report, commitments made during the Public Hearing and also that during their presentation to the Expert Appraisal Committee.<br/><b>Being Complied</b></p>  |
| <p>No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.</p>  | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been found that PAs agree with the condition and the condition is being complied with.<br/><b>Being Complied</b></p>  |
| <p>Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.</p>  | <p>The Project agrees to the condition.</p>  |
| <p>The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.</p>   | <p>The Project agrees to the condition.</p>  |
| <p>The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.</p>   | <p>The Project agrees to the condition.</p>  |
| <p>The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.</p>   | <p>The Project agrees to the condition.</p>  |
| <p>The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention &amp; Control of Pollution) Act, 1974, the Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed</p> | <p>As per the discussion held during the monitoring of the project and report submitted by PAs, it has been stated that the generated municipal solid waste from the township, is being addressed by the Solid Waste Management Rules, 2016 and Hazardous Wastes generated in the mines are being addressed in accordance to the Hazardous &amp; Other Waste Management Rules, 2016. Brief details of the Hazardous Wastes generated in the mine and their treatment methods are as given below:</p> |

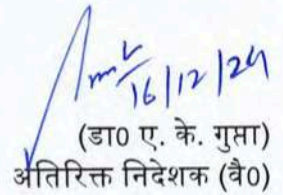
|  |   |   |
|--|---|---|
| by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.   | Type of HW  | Mode of Disposal  |
|  | Used or Spent Oil (Sch I, Cat. 5.1)                 | Sold to Authorized Re Processors/Recycler               |
|  | Wastes or residues containing oil (Sch I, Cat. 5.2) | Being disposed of through authorised disposal facility. |
| <p>However, it has been found that the hazardous waste handling and management is very pathetic on the project site. It seems all concerns involving its management are unfamiliar with the Hazardous waste authorization handling and its management Rules, Guidelines, etc. It is of utmost importance to organize training for officers/workers involved in its handling and management. In addition to the above, spillage of waste lubricating oil, etc can be collected and stored in the dedicated drum, and the storage area can be repaired/constructed as per the Guidelines. In addition to the above It has also been found that every dumper/machinery etc vendor has their own workshop, where a significant amount of waste lubricating oil etc. considered as hazardous waste, has been thrown/spilled. For better hazardous waste management at the project level, it is required to accommodate all vendors in demarcated cemented areas places, etc. and generated ETP sludge is being dumped with OB, without consulting with the UPPCB/CPCB. It is required to dispose of ETP sludge as per the CPCB guidelines.</p> <p><b>Not Complied</b></p> |   |   |

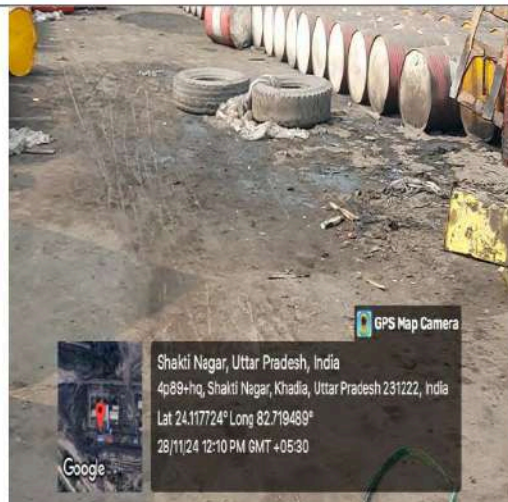
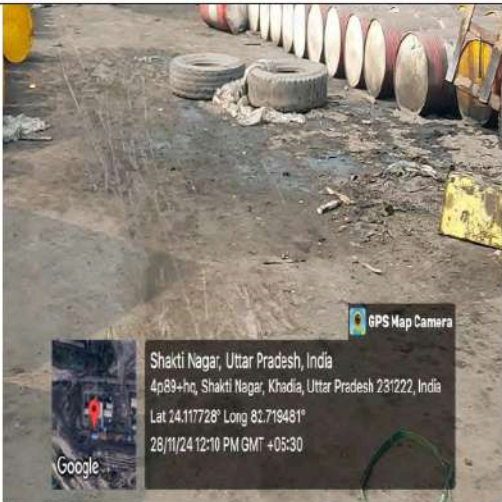
**Conclusion:**

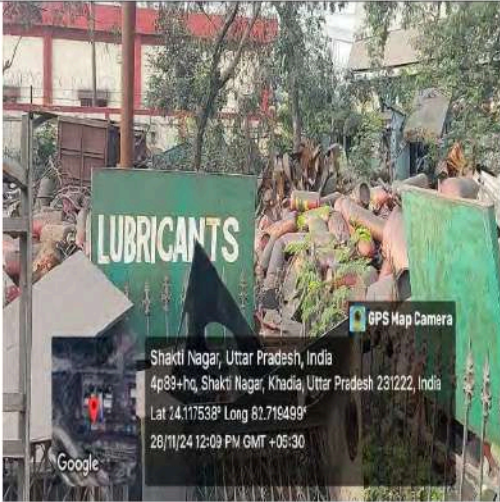
- a) It has been found that hazardous waste handling and management is very pathetic on the project site. It seems all concerns involving its management are unfamiliar with the Hazardous waste authorization handling and its management Rules, Guidelines, etc. It is of utmost importance to organize training for officers/workers involved in its handling and management. In addition to the above, spillage of waste lubricating oil, etc can be collected and stored in the dedicated drum, and the storage area can also be repaired/constructed as per the Guidelines.
- b) It has been found that every dumper/machinery etc vendor has their own workshop, where a significant amount of waste lubricating oil etc. considered as hazardous waste, has been thrown/spilled. For better hazardous waste management at the project level, it is required to accommodate all vendors in demarcated cemented areas places, etc.
- c) It has been found that the generated ETP sludge is being dumped with OB, without consulting with the UPPCB/CPCB. It is required to dispose of ETP sludge as per the CPCB guidelines.
- d) It has been found that major internal road has not been cemented/blacktopped so far. It is required speed up the construction of majority of internal roads on a priority basis, which helps to control dust emission, smooth

transportation of coal, maintenance of vehicles etc.,

- e) It has been found that the management of OB (active and non-active) is not up to the mark, various issues including benching, slope, garland drain, Gabion wall/retaining wall, the density of the plantation on the patches of reclaimed OB etc need to be re-assess and take suitable action for better management and compliance. The condition of the old (in the years 1990-2005) biologically reclaimed Overburden (OB) has not been properly reclaimed so far. It is of utmost importance to take suitable measures for its reclamation in to too.
- f) It has been found that the PAs have developed non-significant green cover on the OB dumps. In addition to the above PAs have also not developed three tire plantations in and around the boundary of the mining lease. It is required to conduct a massive drive of the plantation during the ongoing monsoon period to strengthen the green belt on OB as well as the boundary of the mining lease,
- g) It has been observed that various non-native plants have also been planted on the OB dump for biological reclamation. It is required to stick with native species for better biological reclamation of the OB dump only.
- h) It has been found that PAs have yet not developed 10 ha Sal nursery so far. It is required to take suitable action for the setting of Sal Nursery on a priority basis.
- i) It has been found that the management of water sprinklers (Fixed/moveable and mist gun) should be reviewed at the project level, for better and more efficient management. Nozal of fixed sprinklers can be cleaned/replaced regularly for their meaningful uses.
- j) It has been found that the wheel washing system has not been done so far. It is directed to construct as early as possible to control the dust.
- k) As per the submitted analysis report data of various parameters are found within the permissible limits. Besides, values of SPM, RPM & PM<sub>2.5</sub> in various locations are found above the permissible limits. It is required to take suitable measures for its controlling,
- l) It has been found that PAs have yet not constructed bio-toilet in the study village. It is required to construct a bio-toilet as early as possible.
- m) It has been found that the CEQMS has been installed in ETP. However, the Connectivity of installed CEQMS with SPCB and CPCB server is in progress. It is required to expedite the above work.
- n) It has been found that the procurement of electric vehicles has not been done so far. It is directed to take suitable action for the procurement of electric vehicles on a priority basis.
- o) It has been found that the PAs have yet not commissioned solar lighting systems on the road used for the transportation of the coal and solar park. It is required to take suitable action on the execution of the solar lights on the transportation road and solar park at earliest.

  
 (डा० ए. के. गुप्ता)  
 अतिरिक्त निदेशक (वै०)





**खड़िया क्षेत्र**

Name and address of Industry - Khadia Project, NCL, Tehsil District - Sonbhadra  
उद्योग का नाम और पता - खड़िया परियोजना, पल्सीएस 1 तहसील - झुझी, जिला - सोनभद्रा

Type of Waste - Used oil (Category Y 5 1) (Liquid, Ignitable)  
अपशिष्ट का प्रकार - प्रयुक्त तेल (श्रेणी 5. 1) (तरल, ज्वलनशील)

Authorized Quantity - 250 KL/year  
अधिकृत मात्रा - 250 प्रति वर्ष

Authorization number - 12/Haz/891, valid till 18/06/2022  
प्रतिपत्र संख्या - 12/Haz/891, 18/06/2022 तक मान्य

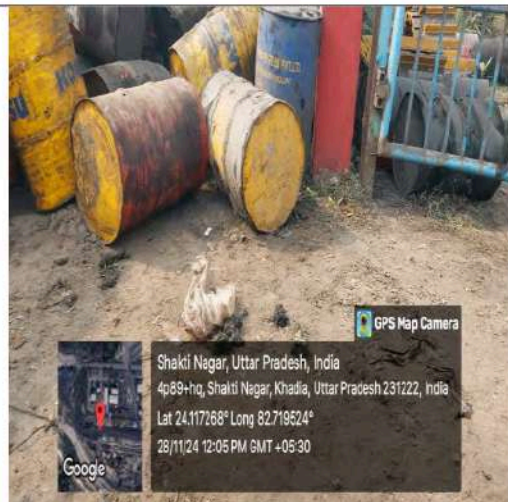
precautions - Use of Appropriate PPE such as gloves, safety mask etc.  
सावधानियाँ उपयुक्त - पीपीई का उपयोग करें जैसे दस्ताने, सुरक्षा चश्मे, मास्क आदि

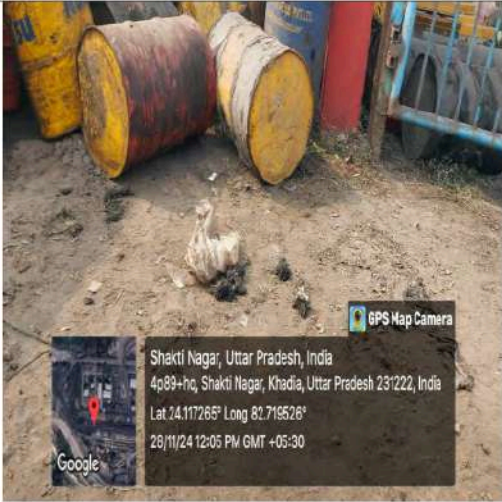
Mode of storage - In drums kept inside purpose built structure  
भंडारण की विधि - तैल का नीचे रखना

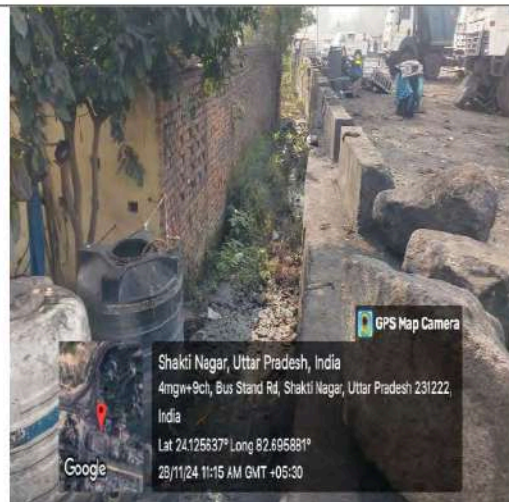
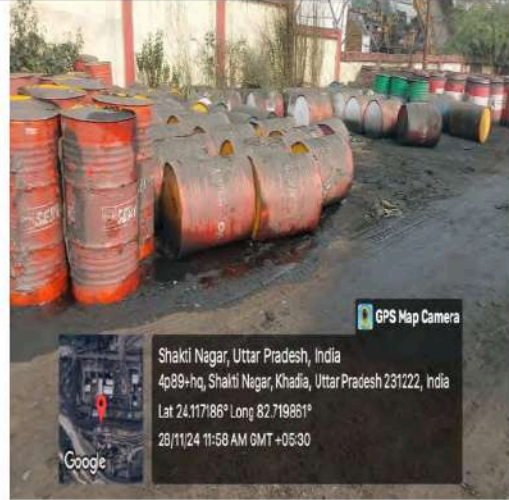
Mode of disposal - Recycling through authorized external agency  
निपटारण का तरीका - अधिकृत बाहरी एजेंसी के माध्यम से पुनर्चक्रण

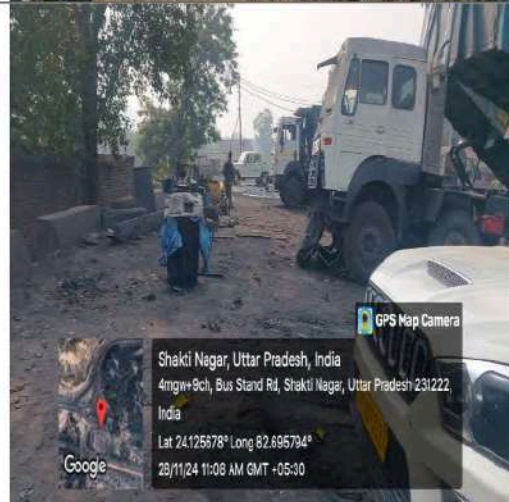
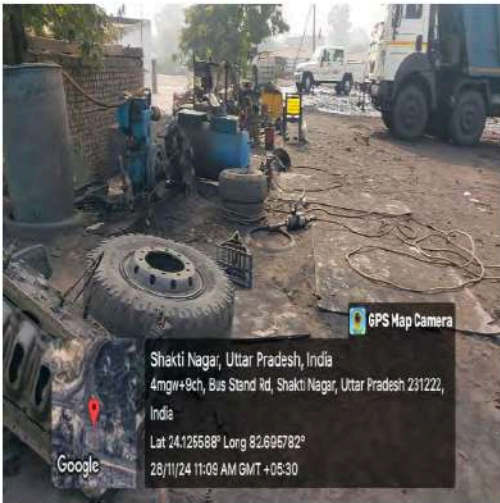
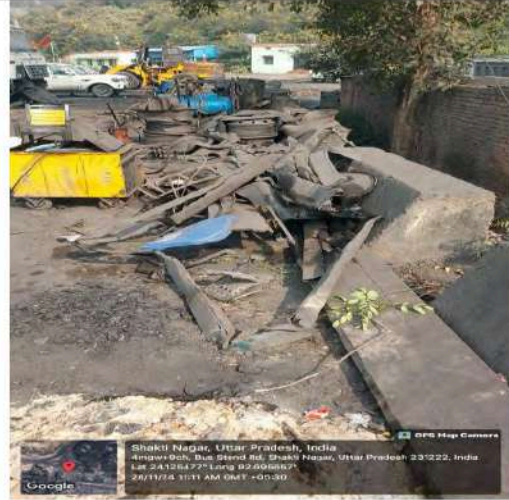
|                                       |             |                               |
|---------------------------------------|-------------|-------------------------------|
|                                       |             |                               |
| Danger - Hazardous Waste Storage Area | Inflammable | Unauthorized Entry Prohibited |

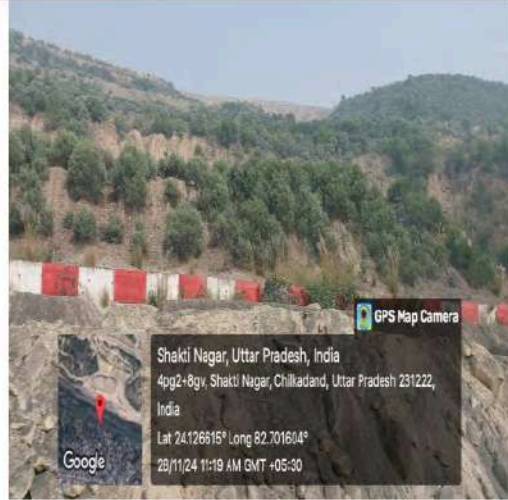
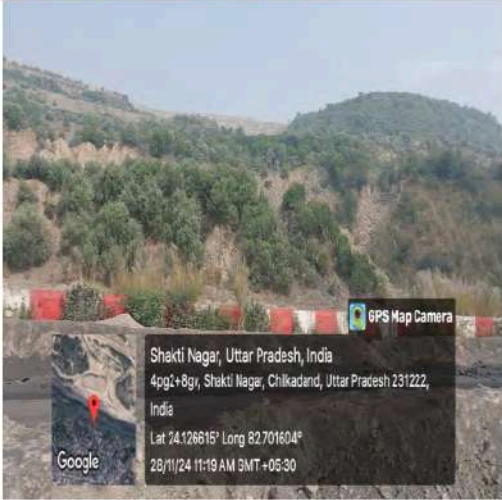
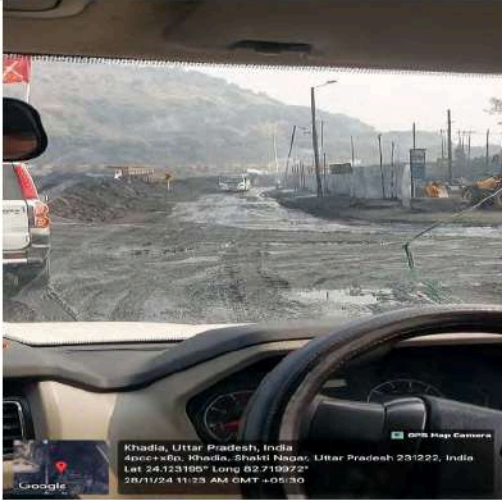
GPS Map Camera  
Shakti Nagar, Uttar Pradesh, India  
4p89+hq, Shakti Nagar, Khadia, Uttar Pradesh 231222, India  
Lat 24.117189° Long 82.719563°  
28/11/24 12:06 PM GMT +05:30

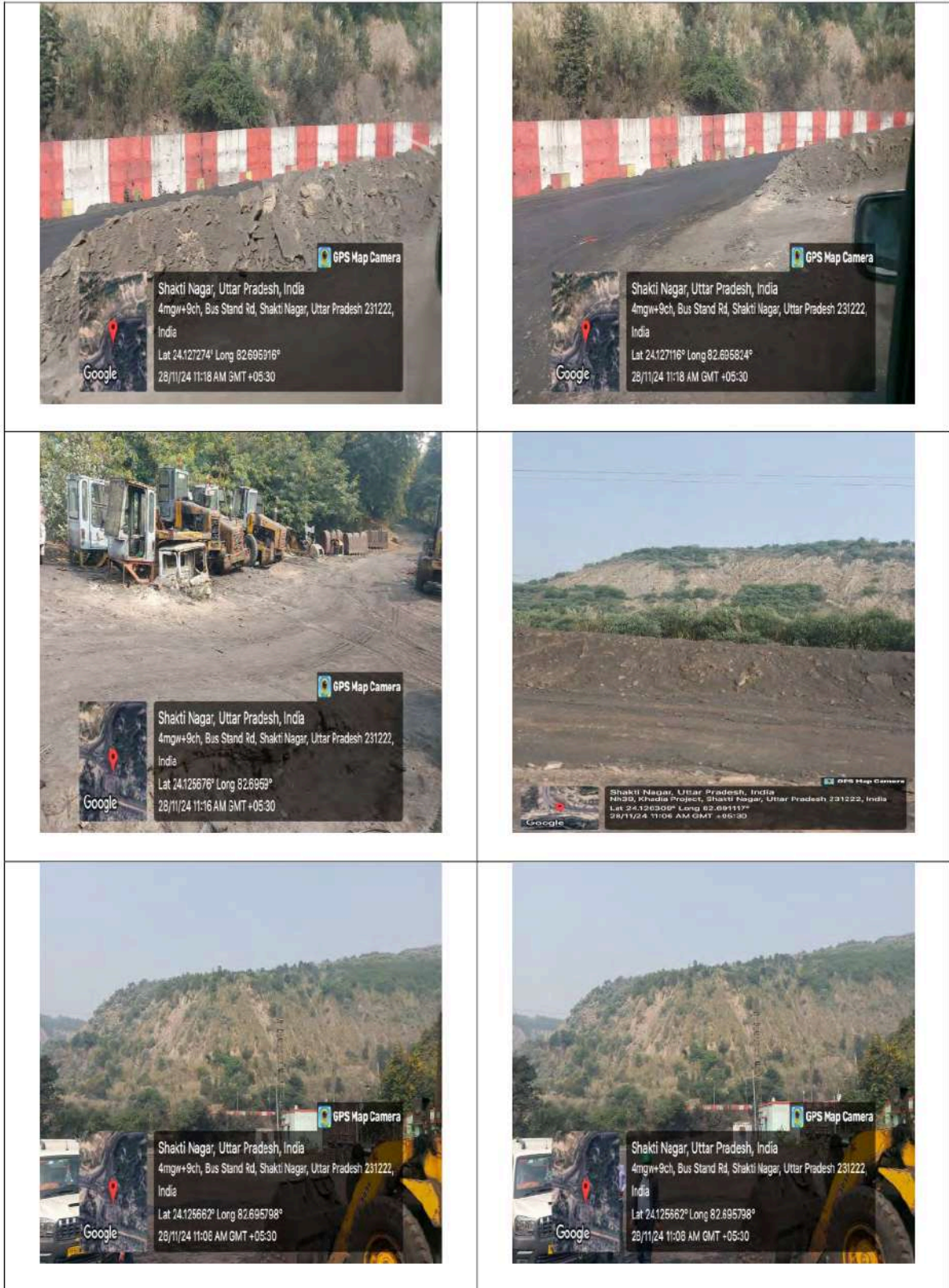




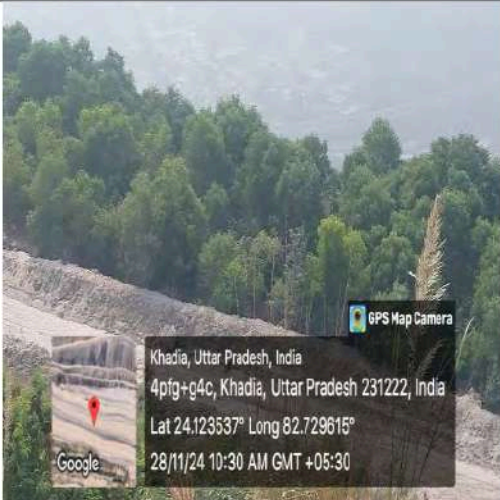
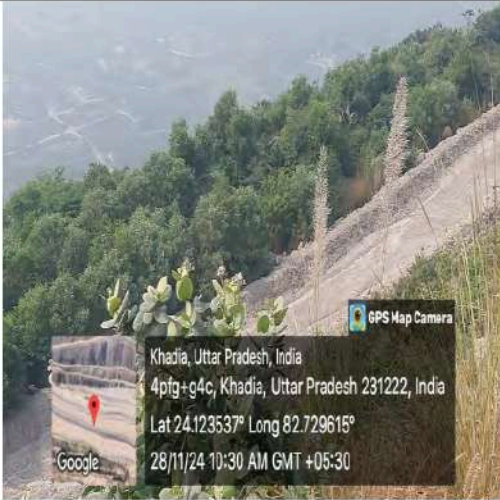
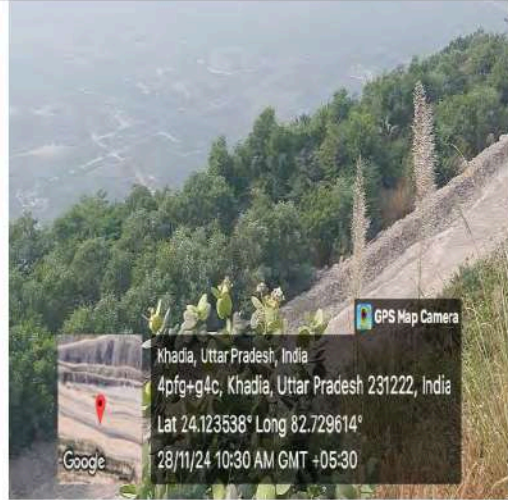


















Speed Post/Online

**F. No. IA-L-11011/51/2024-IA-I**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Compliance & Monitoring Division-IA Division)

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Indira Paryavaran Bhavan  
Jor Bagh Road, Aliganj  
New Delhi-110 003  
Email: moefcc-monitoring@gov.in

**Dated: 14<sup>th</sup> January, 2025****To,**

The General Manager  
Northern Coalfields Ltd. (NCL)  
General Manager Khadia, P.O. Shaktinagar,  
Distt.:Sonebhadra, Uttar Pradesh PIN 231222

**Sub: Action Taken Report (ATR)- Non compliances observed with respect to the project on "Expansion of Khadia Opencast coal mining project for increase in production capacity from 14 MTPA to 15 MTPA (increase of 10% w.r.t 10 MTPA) in land area of 1640 Ha by M/s Northern Coalfields Ltd. located in the village Khadia, Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) & village Dhudhichua, Tehsil Singrauli, District Singrauli (Madhya Pradesh)"- reg.**

**Ref: i. Ministry's EC letter No J-11015/255/2006 IA. II (M) dated 23.03.2016, 27.07.2022 and 07.02.2024**  
**ii. RO, Lucknow monitoring report.**

Sir,

Environmental Clearance (EC) was granted to M/s Northern Coalfields Ltd. located in the village Khadia, Tehsil Dudhi, District Sonbhadra (Uttar Pradesh) & village Dhudhichua, Tehsil Singrauli, District Singrauli (Madhya Pradesh) vide letter No J-11015/255/2006 IA. II (M) dated 23.03.2016, 27.07.2022 and 07.02.2024 subject to implementation of the various conditions and environmental safeguards contained therein.

2. The project was monitored by the Regional of MoEF&CC at Lucknow on 27-28.11.2024 and the report was submitted to the Ministry (copy enclosed).

3. The inspection report has been examined by the Ministry and following are observed non-compliance on the basis of review of RO's report:

- i. Garland drain has not been provided as per the EC condition. (Specific Condition-xi of EC dated 23.03.2016 )
- ii. Dust mask has not been provided to the workers. (Specific Condition-xvi, xvii, xviii, General Condition-ix of EC dated 23.03.2016, Standard Condition h (iii) of EC dated 07.02.2024)


- iii. Green belt has not been developed as per the EC condition. (Specific Condition-xx of EC dated 23.03.2016, Additional Specific condition-iii, iv of EC dated 27.07.2022, (Standard Condition g (ii) of EC dated 07.02.2024)
- iv. Greenbelt has not been developed on the OB dump. (Specific Condition-xxii of EC dated 23.03.2016, (Standard Condition f (v)) of EC dated 07.02.2024)
- v. Pucca road has not been constructed to control dust emissions within the lease area. Three tier planation all along the major road has not been developed. Management of OB dump is not up to the mark. (Specific Condition-xxii, xxiv, xxviii, xxx, xxxi, xxxiii of EC dated 23.03.2016, Specific condition-xxiv, Standard Condition f (iii) of EC dated 07.02.2024)
- vi. Adequate steps to stop the dust emission from the CHP has not been undertaken. (Specific Condition-xxvi of EC dated 23.03.2016)
- vii. Third party monitoring of the project has not been conducted through the NABL accredited laboratory. (General Condition-iii,iv of EC dated 23.03.2016)
- viii. PPEs have not been provided to the workers. (General Condition-x of EC dated 23.03.2016)
- ix. PP has not advertise the EC as per the EC condition. (General Condition-xiii of EC dated 23.03.2016)
- x. Cleaner fuel has not been used in the dumpers/trucks. (Additional Specific condition-ii of EC dated 27.07.2022, Specific condition-xxviii of EC dated 07.02.2024)
- xi. Installed CEQMS has not been connected to the SPCB and CPCB server. (Additional Specific condition-vii of EC dated 27.07.2022)
- xii. Adequate measure for the management of hazardous waste, such as oil containers, ETP sludge, etc. has not been taken, further, ETP sludge is being dumped with OB without consulting with the UPPCB/CPCB. (Additional Specific condition-x of EC dated 27.07.2022, (Standard Condition a (vi)) of EC dated 07.02.2024)
- xiii. Expenditure incurred under CER has not been provided. (Additional Specific condition-xii of EC dated 27.07.2022, Standard Condition i (iii) of EC dated 07.02.2024)
- xiv. Construction of the Rapid Loading System has not yet completed. (Specific condition-i of EC dated 07.02.2024)
- xv. Sal nursery has not been set up by PP. (Specific condition-iv of EC dated 07.02.2024)
- xvi. NOC for expanded capacity has been made to the Central Ground Water Authority. (Specific condition-v of EC dated 07.02.2024)
- xvii. Wheel washing system and procurement of electric vehicles has not been undertaken by the PP. (Specific condition-vi of EC dated 07.02.2024)
- xviii. Compliance of the Standard Operating Procedure (SoP) issued by CPCB regarding the dumping of mine voids with fly ash has not been provided. (Specific condition-xv of EC dated 07.02.2024)
- xix. Solar parks have not been developed. (Specific condition-xvi of EC dated 07.02.2024)

- xx. Data on the plantation of fruit-bearing trees has not been provided. (Specific condition-xviii of EC dated 07.02.2024)
- xxi. Construction of the digital library has not yet completed. (Specific condition-xxi of EC dated 07.02.2024)
- xxii. Solar-mediated light systems on the roads has not been provided. (Specific condition-xxv of EC dated 07.02.2024)
- xxiii. Bio-toilets in the study villages have not been provided. (Specific condition-xxvii of EC dated 07.02.2024)
- xxiv. Feasibility study for the utilization of fly ash with this mine has not been conducted. (Specific condition-xxix of EC dated 07.02.2024)
- xxv. Suitable action on the use of fly ash as an external dump in the mine as per the study has not been taken. (Standard Condition f (iv) of EC dated 07.02.2024)

4. In view of the foregoing, the Project proponent (PP) is hereby directed to submit the clarification/Action Taken Report (ATR) for observed non-compliance within next 30 days from the date of issuance of this letter. It may be noted that, if no satisfactory reply is received within the prescribed time frame, the Ministry will be constrained to take necessary action as deemed fit and appropriate in the circumstances of the case which inter-alia include issuance of Show-Cause Notice under the provision of section (5) of the Environment (Protection) Act, 1986.

This issues with the approval of the Competent Authority.

Encl: As above

  
(Pankaj Verma)  
Scientist 'F'

**Copy to:**

1. Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow – 226020
2. The Member Secretary, Uttar Pradesh Pollution Control Board, Building.No. TC-12V Vibhuti Khand, Gomti Nagar Lucknow-226 010
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
4. Member Secretary, Coal Mining, MoEF&CC. (For information and further necessary action)

  
(Pankaj Verma)  
Scientist 'F'