

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



Minutes of AGENDA FOR 15th MEETING OF EXPERT APPRAISAL COMMIT TEE (COAL MINING SECTOR), SCHEDULED TO BE HELD DURING 18th – 1 Date: 30/09/2024 9th SEPTEMBER 2024, THROUGH ONLINE MODE. meeting Coal Mining held f rom 18/09/2024 to 19/09/2024

MoM ID: EC/MOM/EAC/940497/9/2024

Agenda ID: EC/AGENDA/EAC/940497/9/2024

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

| 18/09/2024 | 10:30 AM | 05:30 PM |
|------------|----------|----------|
| 19/09/2024 | 10:30 AM | 05:30 PM |

1. Opening remarks

At the outset, the Chairman welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of Members who participated in the meeting is at Annexure – VI. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

2. Confirmation of the minutes of previous meeting

Confirmation of the Minutes of the 14th Meeting of the EAC (Coal): The minutes of the 14th Meeting of the EAC (Coal) held during 5 – 7th August 2024 have been confirmed by the EAC.

3. Details of proposals considered by the committee

Day 1 -18/09/2024

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Expansion of Coal Washery Plant from 0.96 MTPA to 5.2 MTPA in two phases (Phase I :- 0.96 to 1.8 MTPA and Phase II :- 1.8 MTPA to 5.2 MTPA) located at Village-Bajarmuda and Dholnara, Tehsil- Tamnar, District- Raig arh, Chhattisgarh by M/s Sarda Energy and Minerals Limited by SARDA ENERGY AND MINERALS LIMITE D located at RAIGARH, CHHATTISGARH

| Proposal For | | Fresh EC | | |
|------------------------|--------------------------|--|-----------------------|--|
| Proposal No File No | | Submission Date Activity (Schedule Item) | | |
| IA/CG/CMIN/473768/2024 | J-11015/37/2004-IA-II(M) | 22/07/2024 | Coal washeries (2(a)) | |

3.1.2. Project Salient Features

15.2: Environment Clearance (EC) for expansion in Coal Washery from 0.96 MTPA to 5.2 MTPA in an area 10.12 Ha by M/s Sarda Energy and Minerals Limited located at Villages: Dholnara, Mudagaon; District: Raigarh; State: Chhattisgarh – Reconsideration for grant of expansion in EC based on ADS reply – reg.

[Online Proposal No. IA/CG/CMIN/473768/2024 File No. J-11015/37/2004-IA-II(M)] [Consultant: GRC India Pvt Ltd; NABET/EIA/21-24/SA 0211 valid till 11/11/2024]

15.2.1: M/s. Sarda Energy and Minerals Limited has made an online application vide proposal No-IA/CG/CMIN/473768/2024, dated 22.05.2024 along with copy of EIA/EMP Report, certified compliance report and Common Application Form (CAF) for seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006 for the project. The proposed project activity is listed at schedule no. 2(a), Coal Washeries under Category "A" of the EIA Notification, 2006 & amendment thereof and as the capacity is more than 2.5 MTPA, is being appraised at Central Level.

The project was granted ToR for expansion of production capacity from 0.96 MTPA to 5.2 MTPA in two phases (Phase I: - 0.96 to 1.8 MTPA and Phase II: - 1.8 MTPA to 5.2 MTPA) vide letter no. J-11015/37/2004-IA-II (M) dated 25.07.2023. The TOR is valid till 24.07.2027.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

15.2.2: Environmental site settings:

The project area is covered under Survey of India Toposheet No. 64N8 and is bounded by geographical co-ordinates ranging from latitude 22°09'56.43"N to 22°10'10.01"N and longitude 83°28'09.92"E to 83°10'27.46"E.

Project does not fall in the Critically Polluted Area (CPA)/ Severely Polluted Area (SPA), as per CEPI Assessment, 2018. This aspect has also been verified and confirmed through DSS.

Forest Area: PP submitted that the project does not involves any forest land. This aspect has also been verified and confirmed through DSS.

Protected Area: PP submitted that the project is not located within 10 km of any ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. and there is no violation of WLP act. This aspect has also been verified and confirmed through DSS.

7 Schedule-I species viz Elephas maximus (Elephant), Mellivora capensis (Honey badger), Melursus ursinus (Sloth bear), Panthera pardus (Panther), Striped hyaena (Hyena), Python molurus (Python), Pavo cristatus (Indian peafowl) has been sighted in the study area. Wildlife conservation plan has been prepared and approved by PCCF, Chhattisgarh.

Project Area: PP submitted that the existing plant is over 10.12 Ha of land and for the expansion project no additional land is required. Thus, total land required will remain same i.e. 10.12 Ha after expansion which has been provided to the proponent through vesting order.

15.2.3: Details of the ToR are furnished below:

| Date of Applicatio n | | | ToR Validity | |
|-------------------------|-------------------------------|------------|--------------|--|
| 10.07.2023 | J-11015/37/2004-IA- II (M) | 25.07.2023 | 24.07.2027 | |

15.2.4: Details of existing EC and its implementation status

The existing 0.96 MTPA Coal Washery obtained EC from SEIAA, Chhattisgarh vide letter no. 309/SEIAA-CG/EC/Coal Washery/RGH/10 dated 23.08.2010. CTE was obtained from CECB on 30.10.2010. Renewal of CTO was obtained from CECB on 10.07.2024 and same is valid till 31.05.2026. Production details of the same are as follows:

| Year | Actual Coal Production in MTPA | Approved Production Capacity in MTPA as per EC | Excess Production | |
|---------|--------------------------------|--|--------------------------|--|
| 2023-24 | 0.95 | 0.96 | Nil | |

15.2.5: Certified Compliance Report: The Status of compliance of earlier EC was obtained from Regional Office, Raipur vide letter no. 18-D-25/2010 (Env)-46, dated 09.05.2024 in the name of M/s. Sarda Energy and Minerals Limited. The Action taken report regarding the partially complied/non-complied condition was submitted to Regional officer MoEF&CC, Raipur vide letter no. SEML/ENV/CWI2024-25/5758 dated 20.05.2024. MoEF&CC (RO), Raipur evaluated the same and has issued letter vide File No. 18-D-25/2010 (Env) /121 dated 10.08.2024. The details of the observations made by IRO in the report dated 10.08.2024 along with its re-assessment as furnished by the PP is given as below: -

| S.N o. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-----------|---|---|--|
| 1. | Condition XVII The proponent informed t hat details of safety measures including plant layout in the plan coal stock yard have already been submitted to CECB/SEIAA/or Regional Office of MoEF&C C. However, no document/evidence of such details have been received in this Sub-Office. PP shall submit Details of safety measures including approved plant layout in the plan coal stock yard. | Safety measures plan along with approved Location Plan t layout is submitted. | Safety measures plan along wi th plant location layout has be en received in this office. On p erusal of the safety measures p lan it has been observed that th e said plan mentions the vario us safety measures during cons truction phase, during operatio n phase and maintenance phas e and the personnel responsibl e for ensuring the safety. |
| 2. | Condition XVIII | Comprehensive Plantation p | Comprehensive plantation pla |

| S.N o. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-----------|--|---|--|
| | The proponent has not developed a green belt of 3 3% of total area of project area. Therefore, the proponent is instructed to submit the comprehensive plan for plantation over an area of 3.34 ha. | lan with year-wise breakup a nd earmarked funds allocate d for plantation is enclosed. In this monsoon season we s hall plant different plant spe cies of 2000 nos all along th e boundary. | n including eleven plant specie s to be planted during 2024-25 and the plantation map with fu nds earmarked (Rs 20 lakhs) h as been received in the office. |
| | PP shall submit Compre hensive plan for plantati on over an area of 3.34 h a | VC C | |
| 3. | The proponent informed that total expenditure incurred for implementation of EMP measure has been Rs.453.0 lakhs. However, no documents/ evidences of implementation of recommendations of EIA/EMP and socioeconomic development activities in the surrounding villages. Further the proponent informed that the code of practice for coal washery issued by Central Pollution Control Board. PP shall submit documents/ evidences of implementation of recommendations of EIA/EMP and socio-economic development activities in the surrounding villages. | All environmental measures with budget incurred as com mitted in EIA/EMP report h as been taken up since the c ommencement of operation of coal washery. Details Enc losed Socio developmental activiti es carried in the surrounding villages with year-wise budg et incurred along with the ph otographs is enclosed. | Environment protection measures and safeguards recommended in the EIA/EMP report, CSR activities carried with pictures and funds earmarked have been received in the office. |
| 4. | Condition XXI The proponent has constructed rainwater harvesting over 26900 m ² area in the premise. However, no documents/evidence that detailed scheme for rainwater harvesting was prepared in consultation with CGWA/SGWB and same submitted to CECB/SEIAA/ or Re | Four Rainwater harvesting st ructures have been construct ed in consultation and as per the guidelines of CGWA/C GWB. Photographs of Rain water harvesting structures e nclosed. | Rainwater harvesting structure s with measurements, coefficie nt of runoffs and quantity of ra inwater has been received in th e office. |

| S.N o. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-----------|--|--|---|
| | gional Office of MoEF&C C. The proponent informe d that no ground water has been used. PP shall submit docume nts/evidence that detaile d scheme for rainwater h arvesting was prepared i n consultation with CG WA/SGWB. | | |
| 5. | Condition XXXVII The proponent informed t hat coal washery was insta lled in October, 2010 and commissioned in May 201 1 adjacent to our Karwahi open cast coal mine. Due t o the unavailability of RO M coal, coal washery was temporarily discontinued f rom 31/03/2015 to 13/2/2 021and restarted on 14/2/2 022. However, no relevant documents have been rece ived in this Sub-Office. PP shall submit all CTO s obtained from CECB a nd the validity of environmental clearance dated 23/08/2010 | Final approval of the project and date of commencement of land development work a nd commissioning of the coa I washery has already been s ubmitted to Regional Office Bhopal. A copy of the same is enclosed. Financial closure shall be int imated to SEIAA and Regional Office of Raipur. All CTE, CTO's & Valid E C copies are enclosed. | a.) EC No.309/SEIAA-CG/E C/ Coal Washery/RGH 10/dated 23/8/2010 was obtain ed from SEIAA, Chattisgar h. b.) CTE dated 30/10/2011 was obtained from CECB. c.) (c) CTO dated 24/5/2011 w as obtained from CECB and same was valid up to 23/5/2012. d.) Renewal of CTO dated 19/7/2012 was obtained from CECB and same was valid up to 30/4/2014. e.) Renewal of CTO dated 31/10/2014 was obtained from CECB and same was valid up to 30/4/2016. f.) Renewal of CTO dated 23/6/2021 was obtained from CECB and same was valid up to 30/4/2016. f.) Renewal of CTO dated 23/6/2021 was obtained from CECB and same was valid up to 22/6/2024. g.) (Renewal of CTO dated 10/7/2024 was obtained from CECB and same is valid up to 10/7/2026. h.) The proponent vide letter d ated 12/12/2011 and 14/3/2 022 has intimated CECB ab out the commencement of o peration of coal washery. The project proponent informed that financial closure shall be intimated to SEIAA and regional office of Raipur in due time. |

- i. The proposed project is for Expansion of Coal Washery Plant located at Village-Bajarmuda and Dholnara, Tehsil- Tamnar, District- Raigarh, Chhattisgarh from 0.96MTPA to 5.2 MTPA in two phases (Phase I :- 0.96 to 1.8 MTPA and Phase II :- 1.8 MTPA to 5.2 MTPA).
- ii. Total coal requirement after expansion will be 5.2 MTPA out of which 1.8 MTPA will be sourced from PP's own mine adjacent to washery and remaining 3.4 MTPA coal will be taken from Jindal Steel and Power Limited. ROM Coal, Clean coal and midlings will be transported through road & rail network. PP's own railway siding is also proposed which is likely to be operational by 2026. Complete transportation of coal will be through railway once the railway siding gets operational.
- iii. The project site is at the distance of about 12.5 km towards East from SH-1. The nearest railway station is Raigarh Railway Station which is located at about 31.7 km in South direction. Nearest airport is Veer Surendra Sai Airport, Jharsuguda at 64.5 km in SE.
- **15.2.7: Legal Issues/ Violation:** PP submitted that there is no legal issue/violation wr.t i) Environment (Protection) Act, ii) Air(P&CP) Act, Water (P&CP), Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam 1980, Wildlife Protection Act, MMDR Act, Factories Act. Further, there is no court case on the project.
- **15.2.8: Water Requirement:** PP submitted that the water requirement after expansion will be 851 KLD (existing is 376 KLD). The water will be sourced from adjacent mine sumps, for which NOC from CGWA vide NOC No. CGWA/NOC/MIN/ORIG/2022/17116 dated 25.11.2022, valid up to 24.11.2024 has been obtained. PP also submitted that groundwater will be used for domestic purposes, for which NOC from CGWA for withdrawal of 10 KLD of groundwater has been obtained vide NOC No. CGWA/NOC/IND/ORIG/2022/16989 dated 04.11.2022 valid up to 03.11.2025. PP further submitted that no industrial wastewater will be discharged as the plant is designed on zero effluent discharge principle and sanitary wastewater will be sent to STP. Further, there is no diversion of any river/ nallah proposed.
- **15.2.9:** Power Requirement: PP submitted that the total power requirement for the project is 3.2 MW which will be sourced from Chhattisgarh State Power Distribution Company Limited (CSPDCL). Also, 2x250 kVA DG sets will be operated for emergency use. There will be no any diversion of Hi-Tension/Transmission line due to the proposed expansion.

15.2.10: Baseline Data: Environmental Baseline data has been collected during 1st March 2023 to 31st May 2023 (Pre Monsoon Season):

| Period | Pre Monsoon Season: 1 st March 2023 to 31 st May 2023 |
|--|--|
| AAQ parameter s at 08 Locations | PM ₁₀ :- 57.1-92.7 μg/m ³ PM _{2.5} :- 30.9 – 52.1 μg/m ³ SO ₂ :- 6.3-15.4 μg/m ³ NO ₂ :- 9.1-32.6 μg/m ³ CO:- 280-1430 μg/m ³ |
| AAQ modelling | Incremental GLCs due to the proposed proposal: $PM_{10} := 0.91 \mu g/m^3 \text{ at } 100 \text{ m in NNE}$ $PM_{2.5} := 0.60 \ \mu g/m^3 \text{ at } 100 \text{ m in NNE}$ $SO_2 = 1.87 \ \mu g/m^3 \text{ at } 100 \text{ m in NNE}$ $NO_2 := 2.63 \ \mu g/m^3 \text{ at } 100 \text{ m in NNE}$ $CO := 4.47 \ \mu g/m^3 \text{ at } 100 \text{ m in NNE}$ |
| Ground water qu ality at 08 locati ons | pH: 7.16-7.41 Total Hardness: 256-330 mg/l. Chlorides: 46-57 mg/l, Fluoride: 0.1-0.4 mg/l |

| Period | Pre Monso | Pre Monsoon Season: 1 st March 2023 to 31 st May 2023 | | | | | | | |
|--|---|--|-------------------------------|---|----------------------------|-------------------------|--|--------------------------------|--|
| Surface water qu ality at 8 locatio ns | DO: 5.6-6. BOD: 2.5- | pH: 7.36-7.56 DO: 5.6-6.3 mg/l. BOD: 2.5-4.2 mg/l COD: 12.7-32.3 mg/l | | | | | | | |
| Noise levels | | 45.8 to 73.8 dBA - day time 34.6 to 65.7 dBA- Night time. | | | | | | | |
| Traffic assessme nt study findings | the project Transporta by road. | Existing PCU is 142 PCU/hr on Tamnar road and 309 PCU/hr at SH-1 and existi | | | | | | | |
| | Road | V (Volum U/hr.) | | C (Capaci n PCU/h | | Exi Rat | sting V/C | LOS | |
| | Tamnar Road | 142 | | 525 | | 0.23 | | В | |
| | ased)) at T | amnar road | ed Project wi | J/hr (309 | | | (Existing) + 2 03 (Increase | | |
| | Road | V (Volum Existing | Proposed | Total | C(Cap y InPCU r.) | | Proposed V/C Ratio | LOS | |
| | Tamnar Road | 142 | 203 | 345 | 625 | 1 | 0.55 | С | |
| | SH-1 | 309 | 203 | 512 | 1500 | 7 | 0.34 | В | |
| Flore and found | Conclusion The modification The modification Therefore, | ied LOS on ied LOS on there will be | | d will be remained in LOS af | remained I "B", i.e. | "C", Very | i.e. Good. Good. of the project | | |
| Flora and fauna | badger), <i>M a</i> (Hyena), ghted in th | lelursus ursi Python mol e study area | nus (Sloth be urus (Pythor | ear), <i>Panta</i> a), <i>Pavo c</i> nservation | hera para ristatus (| <i>dus</i> (F (India | ivora capens Panther), Strip n peafowl) h n prepared ar | <i>ped hyaen</i> as been si | |

PP reported that the Laboratory involved in analysis of water, air, noise & soil quality data, etc. has been accredited by the NABL/ MoEF&CC bearing the Certificate of Accreditation No: - TC-7501 and valid till 25.04.2025.

15.2.11: Solid & Hazardous Waste: PP submitted that currently about 0.451 MTPA of Middlings is

being generated during coal washing. The middlings are being stored in an earmarked place for sale to power plants for steam generation. Middlings are transported by road in covered trucks directly to the customer. After expansion of the washery, total of 2.184 MTPA of middlings will be generated during coal washing following the same procedure. Middlings are currently supplied to PP's own unit at Siltara and after expansion remaining middlings will be given to Jindal Steel and Power Limited.

15.2.12: EMP Cost: The budget earmarked by the PP for EMP is Rs. 385.80 Lakhs (Capital) and Rs.

104.5 Lakhs (Recurring).

| S. No | Activity | Capital Cost (Lakh) | Recurring expenses propose d/ annum (Lakh) |
|-------|---|-------------------------|--|
| 1 | Air Pollution Control Measures | 90.8 | 28.0 |
| | Ø DES and Bag House in crusher house | 38 | 5.0 |
| | Ø Fixed Water sprinklers | 20 | 3.0 |
| | Ø Mobile water sprinklers | 10 | 4.0 |
| | Ø Enclosures to belt conveyors | 12.8 | 3.0 |
| | Ø Asphalted internal roads | 15 | 3.0 |
| | Ø Rain gun | 15 | 10 |
| | Water pollution control measures | 94 | 36 |
| | Ø Closed water Circuit, Thickener | 60 | 20 |
| 2 | Ø Storm water drains | 10 | 2.0 |
| | Ø Rainwater Harvesting Pond | 10 | 10 |
| | ØSTP | 05 | 2.5 |
| | Ø Piezometer to monitor ground water lev | 9 | 1.5 |
| 3 | Green belt development | nem 40 | 10.0 |
| 4 | Solar Power Plant | 100 | 20.0 |
| 5 | Environment Management Cell | 28 | 7 |
| 6 | Environmental Monitoring | | 3.5 |
| 7 | Budget for addressing environment rela ted issues raised during public hearing | 33 | |
| | Total | 385.8 | 104.5 |

Duniya on 28.01.2024, in Kelo Pravah on 29.01.2024 and in The Times of India on 30.01.2024. The Public Consultation was conducted on 01.03.2024, at Middle School Ground, Vill - Bajarmuda, Tehsil – Tamnar, Dist – Raigarh, Chhattisgarh under the chairmanship of Ms. Santan Devi Jagde, Additional District Magistrate. The PH was attended by 900 people and 321 nos of written representations were received from and outside the district. The major issues raised during the PH were improvement in infrastructure, concern for drinking water, employment for the locals, air pollution control measures, road safety measures & concern about health of local people. PP earmarked an amount of 160 Lakh for addressing the issues raised during PH.

Following is the action plan along with the budget allocated for each activity by the PP for the issues raised during PH:

| S. | Issue | Physic | Total Bu | | Year | wise Breaku | p | |
|---------|---|--|----------|-------------|--|-------------|--------|--|
| N 0. | Raise d dur ing P H | dur vity a nd act ion pl | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 | |
| 1. | Improvement of Infrastructure in nearby village | PP has proposed to a dopt village Dholn ara for improvement of infrastructure. Village development program under consultation with local pancha yat and district administration for need-based community development activities which woul | Q Name | Payments II | She is produced to the service of th | e.Proce | | |

| S. N | Issue Raise | Physic al acti | Total Bu | | Year | rwise Breaku | p | |
|---------|-----------------------------|---|--|---------|--------------|--------------|---------|--------|
| 0. | | vity a nd act ion pl an | ugei | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 |
| | | d be in addition to the edevel opment plans being undertaken by state and central government. | e-K | RI Par | E | C4x | | |
| 2. | Employme nt for the lo cals | Willing and employ able youths will be identified in consultation with gram panchayat of Bajarmuda, Dholnara and Khamariya. The ywill be provided training for trades namely electrician, fitters, welders, | 25 Lakhs Stipend — 17.0 Lakh (Rs. 1700 0/- stipen d per year to 100 per sons for 1 year) ITI Fee — 8.0 Lakhs (Rs. 800 0/- yearly fee for 10 0 persons for 1 yea r) | 5 Lakhs | 5 Lakhs ents | 5 Lakhs | 5 Lakhs | 5 Lakh |

| S. N | Issue Raise | Physic al acti | Total Bu | | Year | wise Breaku | p | |
|---------|--|--|---|---|---|--|--|--|
| 0. | d dur ing P H | vity a nd act ion pl an | ugei | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 |
| 3. | Air P | painter s, and civil c onstru ction work, etc. Af ter suc cessful compl etion o f traini ng, the youths will be offered emplo yment in com pany i n suita ble gra de. Tree pl | 33 Lakhs | 6.48 Lakh | 6.54 Lakh | 6.6 Lakh | 6.66 Lak | 6.72 L |
| | olluti on Co ntrol Meas ures | antatio n (500 0 tree s) will be don e alon g road side in nearby village s Bajar muda, Dholn ara an d Kha mariya and pr ovidin g Water sprinkl | Ø Plantati on of 5 000 tre es:- 25 Lakhs Ø Installat ion of 300 wa ter spri nklers :- 3 La khs | Ø Plantati on of 1 000 tree s:- 5 La khs Ø Installati on of 6 0 water sprinkle rs :- 0.6 Lakhs | Ø Plantati on of 1 000 tree s:- 5 La khs Ø Installati on of 6 0 water sprinkle rs :- 0.6 Lakhs | Ø Plantati on of 1 000 tre es:- 5 Lakhs Ø Installa tion of 60 wat er spri nklers :- 0.6 Lakhs | M Plantati on of 1 000 tre es:- 5 Lakhs Ø Installa tion of 60 wat er spri nklers :- 0.6 Lakhs | ø Plant ation of 1 000 tree s:- 5 Lak hs Ø Instal latio n of 60 w ater sprin klers :- 0. 6 La |

| S. N | Issue Raise | Physic | Total Bu | | Yearwise Breakup | | | |
|---------|---|---|------------|--|--|--|--|---|
| N 0. | d dur ing P H | al activity and action plan | dget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 9 |
| | | ing on road fo r dust dispers ion co ntrol i n near by vill ages in consult ation with the auth ority. 5 0 no. of Air purifier will be distrib uted G ovt Sc hool B ajarmu da and | Q. A. Nam. | Ø Distribution of 10 no. of air purifiers:- 0.8 Lakhs Maintanance of 10 purifiers:- 0.08 lakhs | Ø Distribution of 10 no. of air purifiers:- 0.8 Lakhs Maintanance of 20 purifiers:- 0.14 Lakhs | Ø Distrib ution o f 10 n o. of ai r purifi ers:- 0. 8 Lak hs Mainta nance of 30 p urifier s:- 0.2 0 Lak hs | Ø Distrib ution o f 10 n o. of ai r purifi ers:- 0. 8 Lak hs Mainta nance of 40 p urifier s:- 0.2 6 Lak hs | khs Ø Distribution of the following of |
| 4. | Conc ern fo r Drin king water | nearby health centres Provid ing thr ee Wat er filte ration (RO) p lant in village Bazar muda and D holnar | 12 Lakhs | 3.6 Lakhs Installatio n:-3 Lak hs, Mainte nance:-0. 6 Lakhs | 3.6 Lakhs Installatio n:-3 Lak hs, Mainte nance:-0. 6 Lakhs | 3.6 Lakh s Installati on:- 3 L akhs, Ma intenance :- 0.6 La khs | 0.6 Lakh s Maintena nce :- 0.6 Lakhs | 0.6 Lakhs Maintenance :- 0.6 Iakhs |
| 5. | Road Safet y Me | Large size co | 5 Lakhs | 1.4 Lakhs | 1.4 Lakhs | 1.4 Lak hs | 0.4 La khs | 0.4 Lak hs |

| S. N | Issue Raise | Physic | Total Bu | | Year | wise Breaku | p | |
|---------|------------------------------------|--|--|--|---|--|---|--|
| 0. | d dur ing P H | al acti vity a nd act ion pl an | dget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 9 |
| | asure s | mirror s will be pro vided at turni ng poi nts of t he roa d conn ecting SH-1 t o wash ery an d regul ar mon itoring of spee d of ve | Q. A. | R.I. | E | Ø Installi ng lar ge siz e conv ex mir rors at turnin g poin ts and speed break ers on villag e road s :- 1 Lakh s | | |
| | | hicles will be done a nd rain ing on Traffic awaren ess wil l be pr ovided in near by vill ages | Nam | CP C G | She is produced in the second | Ø Providi ng Tra ining on Tra ffic A waren ess:- 0.4 L akhs | Ø Providi ng Tra ining on Tra ffic A waren ess:- 0.4 L akhs | Ø Providing Training on Traf fic Aw aren ess :- 0. 4 L akh s |
| 6. | Conc ern ab out he alth o | Arrang ement of 1 M odern | 20 Lakhs | 12 Lakhs | 2 Lakhs | 2 Lakhs | 2 Lakhs | 2 Lakh s |
| | f loca l peop le | Ambul ance w ith Lif e Supp ort sys tem wi th nece ssary Medic | Ø Conducting Healt h che cku p:- R s. 7.5 Lakh | Ø Conduct ing He alth ch ecku p:- Rs. 1.5 La khs | Ø Conduct ing He alth ch ecku p:- Rs. 1.5 La khs | Ø Conducting Healt h che cku p:- R s. 1.5 Lakh | Ø Conducting Healt h che cku p:- R s. 1.5 Lakh | Ø Cond uct ing He alt h c hec ku |

| S. N | Issue Raise | Physic al acti | Total Bu | | Year | wise Breaku | p | |
|---------|---------------------|--|---------------|-----------------|-----------------|-----------------|-----------------|------------------------------------|
| 0. | d dur ing P H | vity a nd act ion pl an | ugei | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-2 |
| | | al Staf f to Su b Heal th Cen tre, Dh olesera and He | S | | | S | s | p:- Rs. 1.5 La kh s |
| | | alth ch eckup and dis tributi on of medici nes in | e-K | RI | E | CAA | | |
| | | Villag es Baz armud a and Dholn ara | 9 | 3/2 PT - 20 | | 1 | DSS | |
| | Tota | | 160 Lakh s | 49.78 Lak hs | 40.44 Lak hs | 31.10 La khs | 19.26 La khs | 19.42 Lakhs |

15.2.14: Plantation: PP submitted that Greenbelt has been already developed in 3.34 ha (33% of total area). Total no. of 8220 trees has been already present. Further 2000 no. of saplings will be planted.

15.2.15: Project Cost: The total capital cost of the project after expansion is Rs 80.12 Crores (Existing-Rs. 39.17 Cr + Expansion-Rs. 40.95 Cr) and the capital cost for environmental protection measures is proposed as Rs 3.86 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.04 Crores. The total employment generation from the project after expansion will be 239.

15.2.16: Affidavit and Undertaking: PP has submitted an undertaking stating that there is no construction done at the project site w.r.t. the expansion part and there is no litigation on the project either at NGT or any other court of law. Total land in under possession of proponent. That there is no difference in the documents submitted and the presentation being made to the EAC. There are no data entry errors in the information uploaded in Parivesh. In case any deviation in data is found in any of the documents, the authorised signatory shall be held responsible and furthermore, the said proposal shall be rejected for the grant of EC.

15.2.17: ADS Information in chronology: Sarda Energy and Minerals Limited has made an online application vide proposal No- IA/CG/CMIN/473768/2024, dated 22.05.2024. The proposal was initially considered in 14th meeting of EAC (Coal) held on 5th – 7th August 2024 Proposal was deferred for want of additional information. The proponent submitted the ADS reply vide letter dated 30.08.2024 and uploaded on PARIVESH on 30.08.2024. Point-wise reply of ADS is given as below:

| Queries | Reply |
|---|--|
| Approved Wildlife Conservation & Managem ent Plan and the distance map w.r.t. the conce rned coal washery plant and PCCF certificate to be submitted on Parivesh Portal. | PP submitted that wildlife conservation pla n with budgetary provision of Rs. 29.48 lak hs has been prepared and same was approv ed by Principal Chief Conservator of Fores t, CG dated 01.08.2024. Copy of approval 1 etter is submitted. |
| | Approved wildlife conservation plan is also submitted. |
| e-KYC | Distance authentication map showing dista nce of nearest wildlife sanctuary and anima 1 corridor has been submitted. |
| | 7 Schedule – I species has been sighted in t he study area, viz. |
| | 1. Elephas maximus (Elephant), |
| | 2. Mellivora Capensis (Honey Badger), |
| व रियान | 3. Melursus ursinus (Sloth bear), |
| 3 40 | 4. Panthera pardus (Panther), |
| | 5. Striped hyaena (Hyena), |
| | 6. Python molurus (Python), |
| | 7. Pavo Cristatus (Indian Peafowl) |
| Action taken report of the Certified complian ce report obtained from RO, Raipur vide lette r no. 18-D-25/2010 (Env)-46, dated 09.05.20 24 must be submitted to the concerned RO, MoEF&CC, to obtain their comments and the same shall be further submitted to the EAC for further consideration. | PP submitted that action taken report w.r.t partially/non-compliance of conditions has been submitted to IRO, Raipur on 20.05.20 24. Closure letter with comments of IRO, Raip ur w.r.t ATR has been obtained vide File N o-18-D-25/2010(Env)/121 dated 10.08.202 4. Copy of closure letter has been submitte d. |
| Revised action plan to address the issues rais ed during public hearing as per the Ministry's O.M. dated 30/09/2020. | As per the observation raised, the budget fo r addressing PH issues has been increased f rom INR 120 lakhs to INR 160 lakhs. |
| | Revised action plan has been submitted. |
| The EMP budget shall be revisited and the budget pertaining to mitigation measures and plantation must be increased. The revised EMP budget shall be submitted. | As per the observation budget for EMP has been increased from INR 2.60 Cr as capital cost and INR 0.84 Cr as recurring cost to I NR 3.86 Cr as capital cost to INR 1.04 Cr a s recurring cost. |
| | Approved Wildlife Conservation & Managem ent Plan and the distance map w.r.t. the concerned coal washery plant and PCCF certificate to be submitted on Parivesh Portal. Action taken report of the Certified complian ce report obtained from RO, Raipur vide letter no. 18-D-25/2010 (Env)-46, dated 09.05.20 24 must be submitted to the concerned RO, MoEF&CC, to obtain their comments and the same shall be further submitted to the EAC for further consideration. Revised action plan to address the issues raised during public hearing as per the Ministry's O.M. dated 30/09/2020. The EMP budget shall be revisited and the budget pertaining to mitigation measures and plantation must be increased. The revised EMP |

| S.N o. | Queries | Reply |
|-----------|--|---|
| | | Revised EMP budget has been submitted. |
| | Action plan for shifting to e-vehicles and CN G/ LNG operated vehicles in the coal washer y shall be submitted. | PP submitted that our own private railway s iding is already proposed which is likely to be operational by 2026. Hence all the trans portation of coal will be through railway si ding. |
| | e-KYC | NOC for taking up private railway siding h as been obtained from Chhattisgarh East Ra ilway Limited vide letter no. CERL/Raipur/SARDA/2022-23/740 dated 23.11.2022. C opy of NOC has been submitted. |
| | RIV | Employees will be encouraged to use electr ic vehicles. Charging stations will be install ed within washery. |
| | Undertaking from the project proponent stating that no ground water will be utilized for the coal washery during its operation phase. | PP informed that out of the total daily water requirement i.e. 851 KLD, 841 KLD water to be used for washery operation, plantation and dust suppression will be sourced from mine sumps. Only 10 KLD water will be so urced from Ground water and will be used only for drinking purpose. |
| | CAC GRI | Permission for dewatering of 1656 KLD wa ter from mine sump and withdrawal of 18 KLD ground water has been obtained from CGWA vide NOC No. CGWA/NOC/MIN/ ORIG/2022/17116 dated 25.11.2022. Copy of NOC and Undertaking for using water fr om mine sump for industrial purpose has be en submitted. |
| | There is a Government school namely Bajar muda at a distance of 0.830 km from the project boundary in northern direction. Action plan for relocation/mitigation measures to be a dopted for the same shall be furnished. | PP is committed to have minimum adverse impact on Bajarmuda Government school. Following mitigation measures have been t aken to minimize the impact on Sensitive ar eas within the study area: - Ø Bag filters will be provided to crushers f or control of air emission. Ø Greenbelt will be thickened along the nor thern boundary of plant to minimize the pollutant emission due to project. Ø Village roads will be maintained and ma de pucca to have minimum dust emission. |

| S.N o. | Queries | Reply |
|-----------|---------|---|
| | e-KYC | Ø Only PUC certified trucks will be allowed for Transportation of raw materials. Trucks will be kept covered. Ø No truck movement will be allowed during peak hours. Even during non-peak hours speed of trucks will be limited to 10 kmph near school. Note: The Govt School of Village -Bajarmuda lies within the Mine lease area of Operational "Gare Pelma Sector – III" Coal Mine of Chhattisgarh State Power Generation Company Ltd (CSPGCL). |

15.2.18: Written submissions by the proponent

Written submission made by PP are summarized as below:

| S. No. | Points | Written submissions made |
|--------|---|---|
| 1. | PP should submit an undertaking regarding following points: | An Undertaking regarding the said points is submitted. |
| | Ø Timeline for private railway siding for tra nsportation. | 5 |
| | Ø That, trucks used for transportation of ra w coal, clean coal & midlings won't be older than 5 year. | |
| | Ø That, remaining plantation will be completed within (1000 Nos) within 30 days of grant of EC. | 15 13 THO |
| | Ø That, PP will explore the possibility of ad ditional plantation outside the plant pre mises along the roads and around sensit ive receptors like schools and hospitals. | E.Processiv |
| | Ø That, PP will install three (3) nos RO wat er purification system of having capacit y of 125 LPH each in villages Bajarmu da, Dholnara and Khamariya. | nts |
| | Ø That, PP will install solar plant of capacit y 1 MW within plant premises. | |
| 2. | PP should submit greenbelt photographs ha ving GPS coordinates. | PP informed that 3.34 ha land has been earm arked for greenbelt and 8220 trees are presen t within the project site. Additionally, 1000 n os trees will be planted within 30 days of grant of EC. Photographs of existing greenbelt are submit |

| S. No. | Points | Written submissions made |
|--------|---|---|
| | | ted. |
| 3. | PP should submit revised action plan for ad dressing the issues raised during public hearing. | PP informed that an amount of INR 1.6 cr ha s been allotted for addressing the issues raise d during public hearing. Action plan for addressing the issues has been submitted. |
| 4 | PP should submit the EMP budget details. | PP informed that they have allotted a budget of INR 385.8 lakhs as capital cost for Environment protection measures. Additionally, an amount of INR 104.5 lakhs will be spent per year as recurring cost for the maintenance. Detailed EMP budget is submitted. |
| 5 | PP should submit the NOC and In-principle approval for private railway siding. | PP informed that NOC for setting private rai lway siding has been obtained from Chhattis garh East Railway Limited vide letter no. C ERL/Raipur/SARDA/2022-23/740 dated 23. 11.2022. Copy of NOC is submitted. Further, PP informed that in-principle appro val letter has been received from Divisional Office, South Eastern Railway Limited vide Letter No. P/GCT/EC/BUMA/SARDAE& M/22/11/04 dated 17.01.2023. Copy of in-principle approval is submitted. |

3.1.3. Deliberations by the committee in previous meetings

Date of EAC 1:07/08/2024 Deliberations of EAC 1:

14.13.16: Committee after deliberations noted the following:

Recommendations of the Committee:

14.13.17: In view of the foregoing and after detailed deliberations, the committee *deferred* the proposal, and sought the following additional information for further consideration of the proposal.

3.1.4. Deliberations by the EAC in current meetings

15.2.19: The Committee noted the following:

xxiii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

Recommendations of the Committee:

3.1.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.1.6. Details of Environment Conditions

3.1.6.1. Specific

| | ecific Conditions |
|-----|---|
| 1. | PP shall deploy atleast 20% of overall fleet of trucks as electrical or CNG/LNG based trucks for transportation of raw coal, washed coal, midlings. Also, the vehicles to be used for washery operations and transportation shall not be older than 5 years. |
| Spe | ecific conditions |
| 1. | A traffic circulation plan must be designed by some reputed institute and the same shall be implemented. |
| 2. | Project proponent shall deploy trucks having Gross Capacity of 55 ton and carrying capacity of 40 tons for road transportation of raw coal, clean coal and middling, rejects to reduce the fleet size. Transportation of run-of-mine (ROM) Coal, washed coal and rejects coal by road is permitted till 31/12/2026. The private railway siding of PP must be established by 31.12.2026 and the transportation of coal and rejects should take place through railways only, thereafter. |
| 3. | |
| 4. | Water spraying shall be done on regular basis inside and around the project area (within 2 km of the plant site) on a regular interval and a log book should be maintained for the same. The fog cannon must be installed at periphery of the Coal washery in order to suppress the dust. |
| 5. | All the roads proposed to be constructed inside and around the periphery of the plant shall be concrete road only. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as schools, hospitals etc. |
| 6. | Greenbelt has been already developed in 3.34 ha (33% of total area). Total no. of 8220 trees has been already planted. Further 2000 no. of saplings shall be planted during 2024-25. Greenbelt shall be thickened along the northern boundary of plant to minimize the pollutant emission due to project on Bajarmuda school as committed. Greenbelt of 30-50 m width, consisting of at least 3 tiers around plant boundary shall be maintained. In addition to this, tree plantation (5000 trees) will be done in nearby villages Bajarmuda, Dholnara and Khamariya and the near by sensitive receptors school and hospitals during 2024-25. |
| 7. | The Plant will operate on closed water circuit with a concept of 'Zero Liquid Discharge' (ZLD). 100% water will be recycled and no treated & untreated wastewater shall be discharged outside the boundaries of project area. |
| 8. | Project proponent shall implement the protective measures as proposed in environment management plan (EMP) in a time-bound manner. The budget earmarked for the same is Rs 385.8 Lakhs (Capital) and Rs 104.5 Lakhs (recurring)/ annum and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office of the Ministry for the activities carried out during the previous year. |
| 9. | Wildlife conservation plan as approved by the competent authority shall be implemented. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of one |

| | month from the date of grant of EC and the budget approved by the concerned authority shall be deposited in government account. |
|---------|--|
| 1 0. | Project proponent shall install a continuous ambient air quality monitoring station (AQMS) at suitable locations preferably the village side with the consultation of SPCB before commissioning of Plant operations. The real time data so generated shall be uploaded on company's website and it will be linked with CPCB &SPCB web portal. In addition, data should also be displayed digitally at entry and exit gate of Plant for public display. |
| 1 1. | The workers shall be provided all the essential facilities/Personal Protective Equipments (PPE) during operation and maintenance at workplace. |
| 1 2. | Project proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly. Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. |
| 1 | Project proponent shall use of Gas engine/ Cleaner fuel engine for use of machines or as power back up to reduce the pollution load on environment. Project proponent shall implement additional measures to control Air pollution. |
| 1 4. | Project proponent shall implement the activities proposed to address the issues raised during the public hearing in a time bound manner as committed in EIA/EMP report inter-alia installation of 3 nos of water purification (RO) plants must be installed of 125 LPH capacity each in villages Bajarmuda, Dholnara and Khamariya. The budget earmarked to address the concerns raided during public hearing is Rs. 160 Lakhs (Capital) that should be kept in a separate accounts and audited annually. The implementation status/ action taken report along with the amount spent with documentary proof shall be submitted to the concerned Regional Office of the Ministry for the activities carried out during the previous year. |
| 1 5. | Project proponent shall monitor the heavy metal in the water samples at least twice/year, and install the piezometers for regular monitoring of groundwater level. Report shall be submitted along with six-monthly compliance reports to the concerned Regional Office of the Ministry. |
| 1 5. | Project proponent to undertake the recruitment of a full-fledged qualified manpower with Environmental Engineer/Env. Science degree background in Environment Management Cell etc., at coal washery plant for compliance of EC conditions. |
| l 7. | Raw coal, washed coal and rejects shall be stored in covered storage facility. Fixed-type high-pressure sprinkler shall be installed in this storage yards. |
| 1 8. | NoC from Central Ground Water Authority (CGWA)/ concerned local authority, as the case may be, shall be obtained before drawing the ground water for the project activities. State pollution control board/pollution control committees shall not issue the consent to operate (CTO) under Air (prevention and control of Pollution) Act and Water (Air (prevention and control of Pollution) Act till the project proponent shall obtain such permission. |
| 1 9. | Project proponent shall construct a 20 ft height wind barrier with galvanized/metal sheet all around the boundary of the washery and install fixed-type water sprinkler all along the boundary wall. |

| 2 0. | Project proponent shall ensure that suitable parking area shall be provided for the parking of the trucks and necessary arrangements (drinking water facility/ rest room/ toilets etc.) shall be provided for the drivers & helpers. | |
|------|--|--|
| 2 1. | Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report. | |

3.1.6.2. Standard

| 2(a) | Coal washeries | | | | | |
|----------|--|--|--|--|--|--|
| Stat | utory compliance | | | | | |
| 1. | 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. | | | | | |
| 2. | The project proponent shall obtain the necessary permission from the Central Ground Water Authority | | | | | |
| 3. | Solid/hazardous waste generated in the washery needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016. | | | | | |
| 4. | Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under. | | | | | |
| Air | qual <mark>ity monitoring and</mark> mitigation measure | | | | | |
| 1. | Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors 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. | | | | | |
| 2. | 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. | | | | | |
| 3. | Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board. | | | | | |
| 4. | All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks. | | | | | |
| 5. | Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations. | | | | | |

Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive 6. emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within 7. stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire. The temporary storage site of reject should be appropriately planned and designed to avoid air and water pollution 8. from such sites. Water quality monitoring and mitigation measures 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 25th September, 2000 and as 1. amended from time to time by the Central Pollution Control Board. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable 2. location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under 3. the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone 4. pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation. 5. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof. The rejects should preferably be utilized in FBC power plant and Thermal Power Plant . If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and 6. post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to 7. MoEFCC and implemented. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of 8. green belt around the plant. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority 9. (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m3/tonne of raw coal. 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 1 and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent 0. regularly to MOEFCC/RO. 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. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around 1 the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should 1. be prepared and implemented in consultation with the irrigation / water resource department in the state

| | government | | | | | |
|-----|---|--|--|--|--|--|
| Noi | Noise and Vibration monitoring and prevention | | | | | |
| 1. | 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. | | | | | |
| 2. | 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. | | | | | |
| Coa | l benefication | | | | | |
| 1. | Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects. | | | | | |
| 2. | Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy | | | | | |
| Gre | en belt | | | | | |
| 1. | 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. | | | | | |
| Pub | olic h <mark>earing and Hum</mark> an health issues | | | | | |
| 1. | 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. 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. | | | | | |
| 2. | 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. | | | | | |
| 3. | Implementation of the time bound 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. | | | | | |
| 4. | The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (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'. | | | | | |
| Mis | cellaneous | | | | | |
| | 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.

1.

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| 2. | 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. |
|---------|--|
| 3. | 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. |
| 4. | The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, 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. |
| 5. | 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. |
| 6. | 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. |
| 7. | The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations. |
| 8. | The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government. |
| 9. | 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. |
| 1 0. | No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC) with such conditions mentioned therein. No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made. |
| 1 1. | 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. |
| 1 2. | The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. |
| 1 3. | The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. |
| 1 4. | 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. |
| 1 5. | 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. |
| 1 6. | Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010. |

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

| Kotre Basantpur Pachmo OCP by CENTRAL COALFIELDS LIMITED located at RAMGARH, JHARKHAND | | | | | |
|--|-----------------------------|-----------------|-----------------------------|--|--|
| Proposal For | | Amendment in EC | | | |
| Proposal No | File No | Submission Date | Activity (Schedule Item) | | |
| IA/JH/CMIN/493041/2024 | IA-J-11011/18/2019-IA-II(I) | 20/08/2024 | Mining of minerals (1(a)) | | |

3.2.2. Project Salient Features

Agenda No. 15.1

15.1: Proposal for amendment in Environment Clearance (EC) of Kotre Basantpur Pachmo OCP (area 1011.87 Ha having capacity 5 MTPA) by M/s Central Coalfields Limited located at Villages: Kotre, Pachmo, Hurdag, Basantpur, Pachanda, Rohawan and Bhagraiya; District: Ramgarh and Bokaro; State: Jharkhand – Amendment in EC – regarding.

[Online Proposal No. IA/JH/CMIN/493041/2024; File No. IA-J-11011/18/2019-IA-II-(I)]

[Consultant: CMPDI - NABET/EIA/22-25/SA 0223 valid up to 08.04.2025]

15.1.1: The instant proposal is for amendment in Environment Clearance granted to M/s Central Coalfields Limited vide letter no. IA-J-11011/18/2019-IA-II (I), dated 18.09.2023 for Kotre Basantpur Pachmo OCP (area 1011.87 Ha having capacity 5 MTPA) located at Villages: Kotre, Pachmo, Hurdag, Basantpur, Pachanda, Rohawan and Bhagraiya; District: Ramgarh and Bokaro; State: Jharkhand Details of all the prior ECs including the EC for which amendment is sought:

| S. No. | Details of Lett er No. | EC/ Expansion E C /Amendment i n EC/ Validity ex tension/ Transfer of EC | Capacity (MTPA) | Area (Ha) | Date of issuance | Status of implementati on |
|-----------|--------------------------------------|--|---------------------|--------------|------------------|--|
| 1. | IA-J-11011/1 8/2019-IA-II-(I) | EC | 5 GREE yments | 1011. 87 | 18.09.20 23 | CTE and CTO has been obtained from the J SPCB on 23.1 1.2023 and 2 2.02.2024 respectively. The project is yet to become operational. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.1.2: The PP has made an online application vide proposal no. IA/JH/CMIN/493041/2024, dated 20.08.2024 for amendment in EC Specific Condition no. 4(v), 4(vi), 4(xxi) & 4(xxx) of the EC dated 18/09/2023. The details of amendment sought along with the justification is summarized as below:

| | Specific/Genera l Condition No. Details of Conditions as pe r EC | | Amendment Sought | Justification |
|---|---|--------------------------------|--------------------------|------------------------|
| S | Specific Conditi | PP shall install dedicated in- | PP shall install dedicat | Construction of Belt C |

| Specific/Genera l Condition No. | Details of Conditions as pe r EC | Amendment Sought | Justification |
|------------------------------------|---|---|---|
| on 4(v) | pit belt conveyor with silo lo ading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road with in three years (i.e. December 2024). Accordingly, SPCB should grant consent to operate. | ed in-pit belt conveyor with silo loading syste m till railway siding for transportation of 9 0% of extracted coal t hrough rail and only 1 0% by road within thr ee years (i.e. December 2026). Accordingly, SPCB should grant consent to operate. | onveyor and other infra structure may take mor e time to commission. |
| Specific Condition 4(vi) | PP shall transport coal thro ugh conveyor belt to the lin ked Kedla Washery (as in a pproved Mine Plan) only o r any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted. | PP shall transport co al through conveyor belt to the linked Ke dla Washery (as in a pproved Mine Plan) only or any coal was hery and no road transportation shall be done for this (Beyon d December 2026). Accordingly, CTO s hould be granted | Construction of Belt Conveyor and other i nfrastructure may tak e some time to comm ission, till then transp ortation of Coal to K edla washery/ any co al washery may be permitted by road transportation. |
| Specific Condition 4(xxi) | PP shall deploy atleast 2 0% of overall fleet of dum pers/trucks as electrical or CNG/LNG based dumpers /trucks for transportation o f Coal/OB etc. and dep loy e-vehicles for workers/ staff in/out of the Mine. | PP shall deploy at le ast 20% of overall fl eet of dumpers/ truc ks as electrical or C NG/LNG based dum pers/trucks for trans portation of Coal/O B etc. (if techno-eco nomically feasible) and deploy e-vehicle s for workers/staff i n/out of the Mine. | Exemption may be given in respect of electrical or CNG/LNG based dumpers /trucks for transportation of Coal/OB etc. In view of the non-availability of suitable techno-economically feasible option in stee ply dipping working seams existing at the Mine. |
| Specific Condition 4(xxx) | PP shall construct new mul tispecialty (50 beds) hospit al in the 10 km of the proje ct area within 5 years for lo cal people out of the approved budget outlay of CSR f unds. The project- affected families shall be given free medical facilities. This shall be done in consultation of | Relaxation in construction of new multis pecialty (50 beds) ho spital in the 10 km of the project area. | Central Coalfield Li mited (CCL) under C SR scheme is already running two Central Hospitals in Ranchi (250 bedded apex hos pital) and at Nai Sara i, Ramgarh (150 bed ded) (at 40 km from KBP Project) equipp |

| Specific/Genera l Condition No. | Details of Conditions as pe r EC | Amendment Sought | Justification |
|------------------------------------|-------------------------------------|-------------------|--|
| KYX 6-Co., | DM of the district | She is Production | ed with all modern fa cilities for testing dia gnosis and treatment. In addition to this C CL is also running R egional Hospitals at Kargali (60 bedded), Dhori (50 bedded), K athara (35 bedded), Rajrappa (20 bedded), Dakra (50 bedded), Dakra (50 bedded) and Kedla (32 bedded) (which is 5 km f rom KBP OCP). Apart from this Hospital s/ Dispensaries are running for immediate medical aid at each project colliery. KBP Project has also planned for construct ion of 6 - bedded hos pital for the medical needs of project affected people. Medical facilities to PAFs are free of any charges at any of the hospitals and dispensaries are being run by CCL. |

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

Observations and deliberations of the Committee:

15.1.3: The EAC noted the following:

- i. MoEF&CC has granted EC for the Kotre Basantpur Pachmo OCP of M/s Central Coalfileds Limited vide letter no. IA-J-11011/18/2019-IA-II-(I), dated 18.09.2023 for capacity of 5 MTPA in an area of 1011.87 Ha.
- ii. The Committee observed that there is total 855.17 Ha of forestland is involved and the Stage II FC has been accorded on the same vide letter dated 14.03.2024.
- iii. The Committee observed that the CTE has been obtained from the Jharkhand State Pollution Control Board (JSPCB) for 5 MTPA vide letter dated 23.11.2023 and obtained CTO from JSPCB vide

letter dated 22.02.2024 which is valid up to 31.12.2024.

- iv. The project is yet to be operational and is undergoing the construction work.
- v. Specific Condition no. 4(v) of EC stipulated that "the PP shall install a dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. December 2024). Accordingly, SPCB should grant consent to operate." The PP justified that the construction work of the project could start only after the grant of EC, hence it will take some time to commission the construction of belt conveyor and other infrastructure. Therefore, PP sought amendment in the said condition seeking time extension for transportation by road till December 2026.

The Committee deliberated on the same and enquired about the length of conveyor belt to be established. PP reported it to be of 2 km length and also submitted that crusher will be installed by March 2025.

The Committee is of the opinion that the length of conveyor belt to be established is of relatively short length and can be easily targeted to be established by July 2026 instead of December 2026.

vi. Specific Condition no. 4(vi) of EC stipulated that "PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted." The PP justified that construction of Belt Conveyor and other infrastructure may take some time to commission, till then transportation of Coal to Kedla washery/ any coal washery may be permitted by road transportation. Therefore, PP sought amendment in the said condition seeking permission for transportation by road till December 2026.

The Committee deliberated on the same and in pursuant to above condition is of the opinion that the establishment of the conveyor belt required can be achieved by July 2026 instead of December 2026.

- vii. The Committee also deliberated on how the transportation of coal to take place while the time conveyor belt is under construction. The PP reported that it will take place by a dedicated road and approach road to mine will be constructed inside and outside the project area of length 1.50 km and 0.26 km respectively. It will also include an already existing road to Kedla Washery of 0.70 km.
- viii. The Committee deliberated on the mitigative measures proposed for air pollution control along the coal transportation road. PP submitted that, coal will be transported through tarpaulin-covered tippers, a mobile mist type sprinkler of 28 KL capacity for dust suppression will be installed, permanent windscreens will be installed along the project's south-western and southern boundaries with a total length of 8 km, PCC topping on the concerned road is proposed to be done, fixed sprinklers along the length of Coal Transportation Route (CTR) are proposed, a vehicle wheel washing system is proposed, 3 row avenue plantation is proposed to be developed all along the transportation roads, also a CAAQMS is proposed to be installed and commissioned. PP reported that all of this will be adopted before the start of the transportation of coal along the dedicated coal transportation road of 1 km.
- ix. The Committee also deliberated about the condition of the coal transportation road and observed that the said road is yet to be constructed. PP reported that the land on which the said road will be constructed is not in possession yet and the construction will be started as soon as the land possession is acquired. Committee also deliberated on the number of trucks which will pass daily through that road on an average. The PP reported that 30 trucks on an average of the capacity of 40 tonnes each are proposed to pass through that road daily.
- x. The Committee is of the opinion that before the mining operations starts the PP must ensure that one CAAQMS shall be installed in the lease area and PP should submit the timeline of completion and budget of the same including additional measures like plantation, mobile sprinklers etc., to the EAC.

- xi. The Committee also deliberated on the plantation being done by the PP and observed that no plantation has been started yet. Committee asked the PP to submit the budget of plantation and a concurrent plantation plan to the Committee.
- xii. Specific Condition 4(xxi) of EC stipulated "PP shall deploy atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc, and deploy e-vehicles for workers/staff in/out of the Mine." The PP justified that due to non-availability of suitable techno- economically feasible option in steeply dipping working seams existing at the Mine, this particular condition may be exempted. The Committee deliberated on the same and is of the opinion that there are multiple options available in this regard. The mine is yet to be operational and available options for electrical or CNG/LNG are yet to be explored by the PP. The PP shall first explore the options available in this regard and accordingly shall fulfil the stipulated condition.
- xiii. Specific Condition 4(xxx) of EC stipulated "PP shall construct new multispecialty (50 beds) hospital in the 10 km of the project area within 5 years for local people out of the approved budget outlay of CSR funds. The project-affected families shall be given free medical facilities. This shall be done in consultation of DM of the district." The PP justified that there are already two Central Hospitals in Ranchi, running under their CSR scheme of 250 and 150 beds each at 40 km from the project area. Apart from this there are 6 other regional hospitals which are being operated by CCL and all of these are within 5 km from the project area. There are also dispensaries running at each project colliery. PP also submitted that it has also planned for construction of 6 bedded hospitals for the medical needs of PAPs and medical facilities to PAFs are free of charge at any hospital or dispensary being run by CCL.

The Committee deliberated on the same and took a serious view on the amendment sought by the PP in this regard. The Committee is of the opinion that the project is yet to be started and PP has not even envisaged the requirement of a multispecialty hospital (50 beds) within 10 km of the project area for locals and came for seeking amendment in the said condition. The Committee is of the opinion that the said condition must be complied with. In addition to this details of the operational primarry health centres and community health centres within 5 km of the mine must be provided to the Committee.

- xiv. The Committee also enquired about the court cases if any. The PP submitted that there is no litigation pending on the project.
- xv. The Committee observed in the DSS KML that there is a school within the project area and deliberated on the mitigative measures proposed by the PP for its safeguard. The PP submitted that it is not proposed to be relocated and greenbelt development is proposed around the school in order to control the air pollution around the school.
- xvi. The Committee also observed that there are 4 seasonal nallahs flowing within the project boundary which are reported to be rain-fed and are nearly dry during the non-monsoon periods. PP submitted that in order to ensure the protection of nallas in a sustainable manner and also to protect the mines from the risk of flooding during rainy season, they involved IIT Roorkee for diversion plan of the concerned nallahs and IIT (ISM) Dhanbad for Sustainability study of the said mines. A detailed project report with respect to diversion of nallah was prepared by IIT Roorkee. Committee observed that Kotre stream will be diverted during the 1st year of construction as it flows through the proposed infrastructure land and for any construction work to happen, it needs to be diverted. Another stream, that is Jhumra is observed to be diverted in 3rd year of operations and will be merged with the Pachmo stream. The Pachmo and Bhagaria streams are proposed to be diverted in 15th and 20th year of operations respectively.
- xvii. The Committee also observed that the said project appears to be falls under Severely Polluted Area (SPA) as per CEPI 2018 Assessment, as it is part of Ramgarh district. PP submitted that as per Jharkhand State Pollution Control Board report dated 10.11.2022, there are 2 SPAs in Ramgarh district (Ramgarh Industrial Area & Patratu Industrial Area) and none in Bokaro. Both the SPAs of Ramgarh are at the distance of 20 km and 38 km respectively. Hence, KBP OCP does not fall

within SPA.

xviii. The Committee also found mismatch in the information submitted by the PP before meeting and took it seriously and is of the view that the PP and Consultant should submit the information and the documents correctly without any error as it leads to ambiguity.

Recommendations of the Committee:

15.1.4: After deliberation, the Committee **recommended** the proposal for amendment in EC granted vide file no. IA-J-11011/18/2019-IA-II-(I) dated 18.09.2023 as detailed below. Other terms and conditions prescribed in the EC dated 18/9/2023 shall remain unchanged.

| Reference in EC lette r dated 18.09.2023 | Description as per ap proved EC | Amendment sought i n EC | Justification/ Remar ks |
|---|---|---|---|
| Specific Condition 4(v) | PP shall install dedicat ed in-pit belt conveyor with silo loading syste m till railway siding fo r transportation of 9 0% of extracted coal t hrough rail and only 1 0% by road within thre e years (i.e. December 2024). Accordingly, S PCB should grant cons ent to operate. | PP shall install dedicat ed in-pit belt conveyor with silo loading syste m till railway siding for transportation of 9 0% of extracted coal t hrough rail and only 1 0% by road within thre e years (i.e. December 2026). Accordingly, S PCB should grant consent to operate. | Partially agreed. PP was asked about the length of conveyor to be established and found it to be 2 km. Committee found it to be achievable by July 2026. Hence, now the condition to be read as "PP shall install dedicated in pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road till July 2026. Accordingly, SPCB should grant consent to operate." |
| Specific Condition 4(v i) | PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted. | PP shall transport co al through conveyor belt to the linked Ke dla Washery (as in a pproved Mine Plan) only or any coal wash ery and no road trans portation shall be do ne for this (Beyond December 2026). Ac cordingly, CTO should be granted. | Partially agreed. With regard to the changes in specific condition 4(v), Committee is of the opinion to amend specific condition 4(vi) as follows. "PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and road transportation allowed for this till July 2026 only. Accordingly, CTO should be granted. |

| Reference in EC lette r dated 18.09.2023 | Description as per ap proved EC | Amendment sought i n EC | Justification/ Remar ks |
|---|--|---|--|
| Specific Condition 4(x xi) | PP shall deploy atleast 20% of overall fleet of dumpers/trucks as elec trical or CNG/LNG ba sed dumpers/trucks for transportation of C oal/ OB etc, and deploy e-vehicles for workers/staff in/out of the Mine. | PP shall deploy at leas t 20% of overall fleet of dumpers/ trucks as electrical or CNG/LN G based dumpers/trucks for transportation of Coal/OB etc. (if techno-economically feasible) and deploy e-vehicles for workers/staff in/out of the Mine. | Not agreed. The Committee is of the opinion that mine is yet to be operational and options for deployment of electrical or CNG/LNG based dumpers/trucks is yet to be explored. Therefore, the condition shall remain intact and PP should explore and introduce the best options available for the same. |
| Specific Condition 4(x xx) | PP shall construct new multispecialty (50 bed s) hospital in the 10 k m of the project area within 5 years for loca l people out of the approved budget outlay of CSR funds. The projec t- affected families shall be given free medica l facilities. This shall be done in consultation of DM of the district | Relaxation in construction of new multispecialty (50 beds) hospital in the 10 km of the project area. | Not agreed. The Committee is of the opinion that this particular condition is not properly envisaged by the PP and it should be given a serious though the before asking for such amendments. The project is yet to be started and health of habitants must be of utmost concern. Therefore, the said condition shall remain intact and no amendment will be granted for the same. |

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Environment Conditions

3.2.6.1. Specific

1.

Specific Condition

PP shall install dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road till July 2026. Accordingly, SPCB should grant consent to operate.

- 2. PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and road transportation allowed for this till July 2026 only. Accordingly, CTO should be granted.
- 3. Other terms and conditions prescribed in the EC dated 18/9/2023 shall remain unchanged.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Proposed Expansion of Parsa East and Kanta Basan Pit Head Coal Washery from 15 MTPA to 21 MTPA at villa ges Salhi, Hariharpur, Parsa, Kente, Ghatbarra, Parogiya and Basan in Udaypur Tehsil, Surguja District, Chhat tisgarh by M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited (RVUNL) over an area of 2682.856 ha by RAJ ASTHAN RAJYA VIDHYUT UTPADAN NIGAM LTD located at SURGUJA, CHHATTISGARH

| Proposal For | KYC | Amendment in EC | |
|------------------------|--------------------------|--|-----------------------|
| Proposal No | File No | Submission Date Activity (Schedule Item) | |
| IA/CG/CMIN/494543/2024 | J-11015/03/2008-IA-II(M) | 02/09/2024 | Coal washeries (2(a)) |

3.3.2. Project Salient Features

Agenda No. 15.4

15.4: Proposal for amendment in Environment Clearance (EC) of Parsa East and Kanta Basan Pit Head Coal Washery (area 2682.856 Ha having capacity 18 MTPA) by M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited located at Villages: Ghatbarra, Salhi, Kedmaforest, Kete, Mahadevpara, Para, Hariharpur; District: Surguja; State: Chhattisgarh – Regarding Amendment in EC [Online Proposal No. IA/CG/CMIN/494543/2024; File No. J-11015/03/2008-IA-II(M)] [Consultant: Vardan Environet LLP NABET/EIA/2326/RA0284 valid up to 04/05/2026]

15.4.1: The proposal is for amendment in Environment Clearance granted to M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited (RRVUNL) vide letter no. J-11015/03/2008-IA.II(M) dated 14.02.2022 and 12.07.2023 granted to Integrated project of Parsa East and Kanta Basan Pit Head Coal Washery (area 2682.856 Ha having capacity 18 MTPA) located in Villages: Ghatbarra, Salhi, Kedmaforest, Kete, Mahadevpara, Parsa, Hariharpur; District: Surguja; State: Chhattisgarh.

Details of all the prior ECs including the EC for which amendment is sought:

| S r. n o. | Details of letter no. | EC/Expansio n EC/Amend ment in EC/v alidity Transf er/Transfer of EC | Capacity (MTPA) | Area (ha) | Date of i ssuance | Status of implementa tion |
|--------------------|-----------------------------------|---|--|----------------|----------------------|---------------------------|
| 1 | J-11015/0 3/2008-I A-II (M) | Environment C learance (EC) | Coal Min ing and P it Head w ashery of 10 MTP A | 2711.034 Ha | 21.12.20 11 | Implemented |
| | -do- | EC revalidatio | 10 MTP A | 2711.034 Ha | 25.07.20 15 | Implemented |

| S r. n o. | Details of letter no. | EC/Expansio n EC/Amend ment in EC/v alidity Transf er/Transfer of EC | Capacity (MTPA) | Area (ha) | Date of i ssuance | Status of implementa tion |
|--------------------|--------------------------|---|--|----------------|----------------------|--|
| | -do- | Environmental Clearance Exp ansion | Coal Min ing and P it Head w ashery fr om 10 to 15 MTP A | 2682.856 Ha | 10.08.20 18 | Implemented |
| | -do- | EC for expansi on of Coal Washery | 15 to 18 MTPA | 2682.856 Ha | 12.07.20 23 | At present following is the process being adopted at the PEKB mines & washery right from mining of coal & washery to dispatch to end users: •ROM Coal of 55000 Tonne/Day from mine is transported to In-pit conveyor at a distance of 0.8 Km to 3.39 Km (average). •ROM Coal is crushed at CHP from 100 mm to size -50 mm. •From CHP the crushed doal is transported to coal washery of 62000Tonne/Day capacity through conveyor belt with different routes of processing plant which is located at a distance of 1 Km. •Washed coal of 42600 Tonne/day is sent to Silo of 4000 Tonne /Hour capacity with the help of 02 Nos. of Stacker - Reclaimer of 4000 Ton PH capacity and ot her belt conveyor. •The same quantity of washed coal is loa |

| S r. n o. | Details of letter no. | EC/Expansio n EC/Amend ment in EC/v alidity Transf er/Transfer of EC | Capacity (MTPA) | Area (ha) | Date of i ssuance | Status of implementa tion |
|--------------------|--------------------------|---|--------------------|-----------|----------------------|--|
| | | | | | | ded in rail wagons for transport to Po wer plant |

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussion held during the meeting, are given as under:

15.4.2: The PP has now made an online application vide proposal no. IA/CG/CMIN/494543/2024, dated 25.04.2024 for amendment of EC Specific Condition no. xii of EC dated 12.07.2023. PP has submitted the following amendment along with the justification:

| Specific/Gener al Condition N o. | Details of Conditions as per EC | Amendment Sought | Justification |
|--|--|---|---|
| Specific Condit ion no. xii | Raw coal washed coal and reject shall be st ored in covered silos or in dome shaped storage facility. Fixed typehigh pressure sprinkle shall be installed in this storage yards. | mendment in Exemption of EC specific of ondition no (xii) for Clearance Type' of the Environment Clearance dated 12.07.20 23 of Parsa East and Kanta Basan (PEKB) Opencast Coal Mine & Washer | The Storage area of Washed Coal, and Reje ct area is spread in approx. 31.14 ha. At present, handling of washed coal is done by two (2) number of Stackers and Reclai mers with height of boom 30 meters. In order to comply with the EC condition an d store coal in a covered silo or dome, a st ructure of height 30 meter is required to be constructed. Such a high dome structure of 30 m spread over 31.14 ha area is like adding on to a potential safety fire hazard and construction of it in mine active area is als o technically unrenderable. Coal is by itself a bad conductor of heat and also possess spontaneous heating property. Together, if it is not ventilated, an occurrence of fire will happen for sure. Hence, covering the whole coal stock in a silo will lead to dows fiery situation. At present following is the process being ad opted at the PEKB mines & washery right from mining of coal & washery to dispatch to end users: ROM Coal of 55000 Tonne/Day from mine is transported to In-pit conveyor at a distance of 0.8 Km to 3.39 Km (average). ROM Coal is crushed at CHP from 100 mm to size -50 mm. From CHP the crushed coal is transported to coal washery of 620 00Tonne/Day capacity through conveyor belt with different ro |

| Specific/Gener al Condition N o. | Details of Conditions as per EC | Amendment Sought | Justification |
|--|---------------------------------------|------------------|--|
| | | -KYC | utes of processing plant which is located at a distance of 01 K m. Washed coal of 42600 Tonne/day i s sent to Silo of 4000Tonne/Ho ur capacity with the help of 02 Nos. of Stacker Reclaimer of 4 000 TPH capacity and other be lt conveyor. The same quantity of washed coal is loaded in rail wagons for transport to Power plant. |

15.4.3: Detail of the court cases:

| Case No. | Court | Brief | Next date of hearing | Decision of court an d its compliance |
|----------------------------------|---------------------------------------|--|---|---|
| Civil Appeal no(s). 4395 of 2014 | Hon'ble Supreme Court of India | Mr. Sudiep filed an appe al before the NGT Delh i, against order dated 28. 03.2012 by the Forest D epartment, Chhattisgarh. Further against the judg ment passed by NGT, R VUNL preferred a civil appeal (CA. no. 4395 of 2014) before the Hon'bl e Supreme Court of Indi a. | Last listed on 16.10.20 23 – Dispo sed off | On 13.09.2022 both the matters were listed together and upon mentioning of Sudiep Shrivastava the Courtissued notice to Ministry of Coal as a party in DK Soni matter. No direction was passed in FC matter. |
| Writ Petition No. 371 of 2019 | Hon'ble Sup reme Court of India | Writ Petition related to PEKB raising issues of: (i) Formation of JV for MDO Operation is again st coal block de-allocati on judgement (ii) washery rejects to pr ivate party is causing los s to RVUNL, and in tur n, tothe public of Rajast han (iii) Coal supplied by PE KB coal Block is at very high price than CIL pric e (iv) EC dated 21st Dece mber 2011 is not being c omplied with. | Last listed on 16.10.20 23 – next d ate of hearing not yet f inal | The matter is tagged along with the CA N o. 4395/2014 and on the last date of hearin g i.e. 13.09.2022 Min istry of Coal is made a party for furnishing its response on the is sue involved in the Writ Petition. |
| Appeal No. 185 | National Gre | The present appeal is fil | Last listed | List after the decisio |

| Case No. | Court | Brief | Next date of hearing | Decision of court an d its compliance |
|------------------------------------|--|---|---|---|
| of 2018 | en Tribunal, New Delhi | ed challenging the Environment Clearance dated 10.08.2018 granted by MOEF for expansion of PEKB from 10 MTPA to 15 MTPA. | on 19.12.20 22 – Dispo sed off | n of the Hon'ble Sup reme Court in Civil Appeal No(s). 4395 o f 2014. Adjourned si ne die. |
| Writ Petition (C) No. 1346/2016 | Hon'ble Hig h Court of C hhattisgarh | The present petition is filed to challenge the order dated 08.1.201 6 passed by the District Level Forest Rights Committee (DLC) Sarguja, office of Collector (Tribal Welfare) Ambikapur, District Sarguja. Matter is regarding Forest Rights of the Community over the forest land. | Last listed on 02.05.20 24 – Next d ate of heari ng not give n | Pleadings are comple te and the matter is at the stage of final hear ing. No next date is fi xed in the matter and shall come up for hea ring in due course. P ost completion of all pleadings, the court of Registrar-1 of Supreme Court has referred this matter to main bench on 23/11/20 16 for final arguments. Presently case is pending before supreme courts after some hearings. |

15.4.4: Written submissions of proponent:
Written submission made by PP are summarized as below:

| S. No. | Raised Points | Reply |
|--------|--|---|
| 1. | Ambient Air Quality M onitoring reports and C ontinous Air Quality m onitoring system data fo r last 3 months. | The Ambient Air Quality (AAQ) levels of 10 locations ar sum marized and Continous air quality reports for last 3 months ar e submitted. |
| 2. | Latest six-monthly compliance report submitted for EC dated 12.07.202 | Six monthly compliance report for the period October 2023 to March 2024 is submitted. |
| 3. | Origin of the Specific c ondition xii: "Raw coal washed coal and rejects shall be stor ed in covered silos or in dome shaped storage fa cility. Fixed high-type p ressure sprinkler shall b e installed in this storag e yards." | Environment Clearance (EC) of PEKB project was granted for Integrated Mine (ROM) and pit head coal washery for 15 MT PA F. No. J-11015/03/2008-IA-II (M) dated 10.08.2018 and s aid condition was not mentioned in this EC. After that project proponent applied for expansion for a capacity from 15 MTP A to 21 MTPA pit head coal washery. The EC was granted for 18 MTPA vide F. No. J-11015/03/2008-IA-II (M) dated 12.0 7.2023. The EIA report submitted for the capacity enhanceme nt did not envisage any provision for covered storage. However, the condition was mentioned in the minutes of the 4 |

| S. No. | Raised Points | Reply | | | |
|--------|--|---|--|--|--|
| | | 1 st meeting of the Expert Appraisal Committee, held during 1 3 – 14 March 2023, Agenda No. 41.1. The copy of the minutes of the 41 st EAC meeting are submitte d. | | | |
| 4. | Mitigation measures for raw coal, washed coal a nd rejects storage area. | In raw coal, washed coal and reject storage areas adequate mo isture will be maintained to ensure that dust is not getting air b orne. Fix type sprinkling will be carried out in the open area to arres t fugitive dust. Further, greenbelt is being maintained around the storage area s. | | | |

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

Observations and deliberation of the Committee:

15.4.4: The EAC noted the following:

- i. MoEF&CC has accorded EC for Parsa East and Kanta Basan Opencast Mine and Pit Head Coal Washery vide letter dated 21.12.2011 for the capacity of 10 MTPA in an area of 2711.034 Ha. Subsequently, EC dated 10.08.2018 was granted for expansion in capacity of coal washery from 10 MTPA to 15 MTPA with reduction in area to 2682.856 Ha. EC dated 10.08.2018 superseded all earlier granted EC's and its amendments in terms of Condition no. 12 of the said EC.
- ii. Later another EC was granted to Integrated project of Parsa East and Kanta Basan Open Cast Coal Mine with expansion in Pit head Coal Washery from 15 MTPA to 18 MTPA in total mine lease area of 2682.856 ha vide letter dated 12.07.2023.
- iii. Coal washery with a capacity of 15 MTPA has been implemented and the expansion of coal washery from 15 to 18 MTPA is under implementation.
- iv. Specific Condition no. xii of EC dated 12.07.2023, stipulated that, "raw coal, washed coal and rejects shall be stored in covered silos or in dome-shaped storage facility. Fixed type high-pressure sprinkler shall be installed in this storage yards." The PP justified that the construction of a structure like this is technically unrenderable, as the storage area is spread in approx. 31.14 Ha and the height required for the same is 30 meters. PP further justified that this could also lead to potential safety fire hazard aqs coal is a bad conductor of heat and also possess spontaneous heating property, which is not ventilated can lead to occurrence of fire which will lead to a fiery situation.
- v. The Committee further deliberated on how storage is being handled right now and PP submitted that at present, the handling of washed coal is done by two nos stackers and reclaimers with a height of boom 30 meters. Regarding transportation of the same the PP submitted that, ROM coal from mine is transported to in-pit conveyor, which is crushed at CHP and then the crushed coal is transported to washery through conveyor belt with different routes. Washed coal is then sent to silo with the help of 2 nos of stackers and reclaimer and other belt conveyor and the same is then loaded in railway wagons for transport to the power plants.
- vi. The Committee deliberated on the CCR of the washery and observed that the CTO for 18 MTPA washery is yet to be acquired, hence washery is still operational on 15 MTPA EC.
- vii. The Committee deliberated on the air quality data of the concerned mines for the last 3 months and found it satisfactory based on the data submitted by the PP. The Committee observed that air quality monitoring devices were installed which are connected to the CPCB server and live AAQMS data was displayed in front of the Committee. The data exhibited diuring the meeting are found to be within the NAAQS.
- viii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

Recommendations of the Committee:

15.4.5: After detailed deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. J-11015/03/2008-IA-II(M) dated 12.07.2023 as detailed below. Other terms and conditions prescribed in EC dated 12.07.2023 shall remain unchanged.:

| Reference in EC lette | Description as per ap proved EC | Amendment sought i | Justification/ Remar |
|------------------------|---|---|---|
| r dated 12.07.2023 | | n EC | ks |
| Specific Condition xii | Raw coal, washed coal and rejects shall be sto red in covered silos or in dome-shaped storag e facility. Fixed type h igh-pressure sprinkler shall be installed in thi s storage yards. | Exemption of EC spec ific condition no (xii) of Environment Cleara nce dated 12.07.2023 of Parsa East and Kant a Basan (PEKB) Open cast Coal Mine & Was hery. | Agreed With regard to the cha nges in specific condit ion xii, Committee is o f the opinion to amend specific condition xii a s follows: "Raw coal, washed co al and rejects shall be stacked properly at ear marked site within stor age yards fitted with w ind breakers/shields. F ixed type high-pressur e sprinkler shall be ins talled in this storage y ards." |

3.3.5. Recommendation of EAC

Recommended

3.3.6. Details of Environment Conditions

3.3.6.1. Specific

| Ado | Additional Specific Conditions | | | | | | |
|-----|--|--|--|--|--|--|--|
| 1. | Raw coal, washed coal and rejects shall be stacked properly at earmarked site within storage yards fitted with wind breakers/shields. Fixed type high-pressure sprinkler shall be installed in this storage yards. | | | | | | |
| 2. | Other terms and conditions prescribed in EC dated 12.07.2023 shall remain unchanged. | | | | | | |

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Amendment in Environment Clearance (EC) of Pakri Barwadih Coal Mining Project, NTPC Mining Limited by NTPC MINING LIMITED located at HAZARIBAGH, JHARKHAND

| Proposal For | Amendment in EC |
|--------------|-----------------|

| Proposal No | File No | Submission Date | Activity (Schedule Item) |
|------------------------|---------|-----------------|-----------------------------|
| IA/JH/CMIN/475123/2024 | N/A | 03/09/2024 | Mining of minerals (1(a)) |

3.4.2. Project Salient Features

Agenda No. 15.3

15.3: Pakri Barwadih Coal Mining Project (area 3319.42 Ha having capacity 18 MTPA) by M/s NTPC Mining Limited located at Villages: Barkagaon, Itij, Chiruadih, Urub, Chepa, Kalan, Nagri, Jugra, Sinduari, Churchu, Carahara, Sonbarsa, Pakri – Barwadih; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/475123/2024; File No. J-11015/692/2007-IA-II(M)]

[Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.3.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/692/2007-IA-II(M) dated 19.05.2009, later transferred to M/s NTPC Mining Limited vide letter no. J-11015/692/2007-IA-II(M) dated 02.05.2024 for Pakri Barwadih Coal Mining Project (area 3319.42 Ha having capacity 18 MTPA) located at Villages: Barkagaon, Itij, Chiruadih, Urub, Chepa, Kalan, Nagri, Jugra, Sinduari, Churchu, Carahara, Sonbarsa, Pakri – Barwadih; District: Hazaribagh; State: Jharkhand.

Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| S. No. | Details of Letter No. | Details of EC/Expa nsion EC/ Amendm ent in EC/ Validity extension/ Transfer of EC | Capacity (MTPA) | Area (Ha) | Date of iss uance | Status of impl ementation |
|-----------|-----------------------------------|---|-----------------|----------------|----------------------|---|
| 1 | J-11015/69 2/2007-IA.I I(M) | Fresh EC | 15 Is if She | 3319.4 | 19.05.2009 | Production of 15 MTPA achi eved during th e year 2023-20 24 |
| 2 | -do- | Amendment in EC [Road transportation granted till 28.06.201 8] | 15 | 3319.4 | 29.06.2016 | Implemented |
| 3 | -do- | Amendment in EC [Specific Condition n os (iii), (vi) & (ix) And General Conditi on nos (ix) & (xiii)] | 15nent | 3319.4 | 07.12.2017 | Being implem ented |
| 4 | -do- | Amendment in EC [Road transportation granted till 28.06.202 0] | 15 | 3319.4 2 Ha | 14.08.2018 | Implemented |
| 5 | -do- | Amendment in EC [Road transport grant ed till 28.06.2022 an | 15 MTP A | 3319.4 2 Ha | 10.11.2020 | Road transport granted till 28. 06.2022 and a |

| S. No. | Details of Letter No. | Details of EC/Expa nsion EC/ Amendm ent in EC/ Validity extension/ Transfer of EC | Capacity (MTPA) | Area (Ha) | Date of iss uance | Status of impl ementation |
|-----------|--------------------------|---|--------------------|----------------|----------------------|---|
| | | d auto extended to 2 8.06.2023 in line wit h Covid notification of MOEF&CC] | | | | uto extended t o 28.06.2023 i n line with Co vid notificatio n of MOEF&C C - Implement ed |
| 6 | -do- | Amendment in EC [Road transport grant ed till 31.10.2023] | 15 MTP A | 3319.4 2 Ha | 16.08.2023 | Implemented |
| 7 | -do- | Amendment in EC [Road transport grant ed till 31.01.2024] | 15 MTP A | 3319.4 2 Ha | 09.11.2023 | Implemented |
| 8 | -do- | Amendment in EC [Road transport grant ed till 31.07.2024] | 15 MTP A | 3319.4 2 Ha | 15.01.2024 | Implemented |
| 9 | -do- | PRC Enhancement (1st phase 20%) as p er MoEF&CC guid elines dated 11/04/2 022 | 18 MTP A | 3319.4 2 Ha | 06.03.2024 | Being implem ented |
| 10 | -do- | Transfer of EC [Transfer from NTP C Ltd to NTPC Mini ng Ltd] | 18 MTP A | 3319.4 2 Ha | 02.05.2024 | Transfer from NTPC Ltd to NTPC Mining Ltd |
| 11 | -do- | Amendment in EC [Road transport grant ed till 31.10.2024] | 18 MTP A | 3319.4 2 Ha | 16.07.2024 | Being Implem ented |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.3.2: The PP has made an online application vide proposal no. IA/JH/CMIN/475123/2024 dated 28.08.2024 for amendment in EC Specific Condition no. 2A(ix) accorded vide letter no. J-11015/692/2007-IA-II(M) dated 19.05.2009, seeking further amendment for extension of timeline regarding transportation of coal by road using State Highway/ Service Road till 31.12.2024 and after that 13 MTPA by belt conveyor and 5 MTPA by State Highway/ Service Road till 31.03.2026.

PP submitted the following details for the amendment sought along with the justification:

| Specific/ General Conditio n No. | Details of Con ditions as per EC | Amendment So ught | | Justification | |
|---|---|---|---|--|--|
| Specific C ondition No 2A (i x) | The PP needs to complete the construction of closed belt conveyor system of a length of 13 km to Banadag railway station. The pp is permitted till 31.10.2 024 to use Service road/State Highways for transportation of coal to Banadag railway siding. | The PP is permit ted to use Servic e Road/ State Hi ghways for trans portation of 18 MTPA of coal to Banadag railway siding till 31.12. 2024 and after th at 13 MTPA by Belt conveyor and 5 MTPA by Service Road/State Highways till 3 1.03.2026 adopting all mitigative measure to control dust pollution. | uction and nd acquisi he delay is unavailable hat due to fulfilment olicy etc., Deputy Control of the payation was stand agit and be take fter 28.04 ding System of the payation was stand agit and be take fter 28.04 ding System of the payation was stand agit and be take fter 28.04 ding System of the payation was stand agit and be take fter 28.04 ding System of the payation of the | Supreme Court has extended and of belt convervide its order dated 2 Misc. Appeal No. 182 No. 6249 of 2021 (NT and Others). Pakri Barwadih Coal dispatches coal from a railway siding at Barwading at Ba | due to various la d order issues. Thainly due to the inent to submit the inent to such protes and in the inent to the inent t |
| | | | i | Civil works | 99.39 |
| | | | ii | Structural Supply | 100 |
| | | | iii | Electrical and Mec hanical Supply | 100 |
| | | | iv | Structural Erection | 87 |
| | | | The Exp | ected Completion Sch | nedule is as foll |
| | | | i | Civil works | 30.09.2024 |
| | | | ii | Structural work | 10.10.2024 |
| 1 | | | iii | Mechanical works | 20.10.2024 |

| Specific/ General Conditio n No. | Details of Con ditions as per EC | Amendment So ught | Justification |
|---|--|---|---|
| | e-com | ZAMANO TO | iv Final Commissioni 31.12.2024 v Final Commissioni 31.12.2024 ng As submitted, the initial EC accorded in 2009 w as for 15 MTPA of Peak rated capacity (PRC), accordingly, Coal Handling Plant (CHP) & Rap id Loading Systems (RLS) of PBCMP was desi gned to transport coal up to 15 MTPA. Subsequ ent upon the revision of PRC, vide File no. J-11 015/692/2007-IA-II(M) dated 16.07.2024, EC was granted to transport coal up to 18 MMT per annum till 31.10.2024. Due to design capability of present CHP & RLS System, which is of 15 MTPA, balance 3 MTP A shall be required to be transported through ro ad after 31.12.2024, till the completion of capacity enhancement of existing coal conveying system, which may require approximately 24-month time. It is also pertinent to mention that, from commissioning till the achievement of its peak rated capacity, the present RLS system will approximately require three to four months of stabilisation period after 31.12.2024. Assuming the comprehensive coal conveying system operates at 90% of its rated capacity after the stabilisation period, there may be additional requirement of 2 MTP A required to be transported through road. Therefore, after 31.12.2024, approx. 5 MTPA out of 18 MTPA shall be required to be transported through road. |

15.3.3: Certified Compliance Report and Action Taken thereof: The PP submitted that CCR from Regional office (RO), Ranchi was received on 19.06.2024 vide letter no. 103-425/376 and PP submitted ATR on the same on 26.08.2024.

With respect to the Condition for which amendment is sought, RO has given its observations and has mentioned that, "during inspection on 30.05.2024 it was observed that coal transportation is still being done by road from Pakri Barwadih coal mine project to Banadag railway siding. It is observed that rapid loading system of the conveyor system is under construction near Banadag railway siding. PP informed that now full efforts are being made to complete the same before 31.12.2024."

15.3.4: Detail of the court cases:

| Case No. | Court | Brief | Next date of he aring | Decision of court a nd its compliance |
|----------------------|-----------------|---|---|---------------------------------------|
| WP (C) 5732/20 16 | HC of Jharkhand | Writ Petition file d by Bhartiya Su raj Dal against S tate of Jharkhan d and others reg arding pollution and diversion of | Next hearing sch eduled on 20.09. 2024. | |

| Case No. | Court | Brief | Next date of he aring | Decision of court a nd its compliance |
|----------------------|-----------------|--|---|---|
| | | forest land witho ut obtaining the consent of Gram Sabhas under the FRA Act 2006. | | |
| WP (C) 4036/20 21 | HC of Jharkhand | Writ Petition has been filed by NT PC against the S tate of Jharkhan d and others against demand of transit fee on 100 % coal production under Jharkhand Forest Produce Transit (Regulation of Transport) Rules 2020 is sued by State of Jharkhand. | Listed for hearing in first week of February 2024. No date showing for now. Next date is not given. | |
| WP (C) 1759/20 23 | HC of Jharkhand | Writ Petition file d by NTPC against the State of J harkhand and others to stay the operation, implementation and execution of the letter No. 43, dated 03.01.2023 of Divisional Forest Officer (West), Hazaribagh by which the State of Jharkhand has demanded the payment of Transit Fee for the second time on the same load by stating that NTPC is liable to generate the challan for the second time when there is a change of mode of transportation. | Next hearing dat e is not given | Hon'ble court vide order dated 06.09.2 024 directed NTPC not to be charged t wice for the same f orest produce on the change of mode of t ransportation for transportation of any f orest produce as transit fee. Hon'ble Court has s tayed the order till n ext date of hearing held on 21/02/24. |
| WP (C) 3256/20 23 | HC of Jharkhand | Writ Petition file d by NTPC agai nst the State of J | | The Hon'ble High Court granted stay o n the letter vide ord |

| Case No. | Court | Brief | Next date of he aring | Decision of court a nd its compliance |
|--|-----------------|--|--|--|
| | | harkhand and ot hers regarding q uashing the lette r No. 3426, date d 23.06.2023 of Divisional Fores t Officer (West), Hazaribagh by w hich Forest Dept t. has denied Co al Transportatio n by Road. | | er dated 30.06.202 4. |
| WP (C) 3614/20 23 | HC of Jharkhand | PIL filled by Shr i Mantu Soni ag ainst State of Jha rkhand and Othe rs regarding FC granted to Pakri Barwadih Coal Mining Project o n forged document (Consent letter of Van Praban dhan Samittee). | Next hearing is s cheduled on 20. 09.2024 | Ø CA filled by NTP C on 18.06.202 4. Ø Rejoinder filled b y applicant on 2 7.06.2024. Ø Supplementary C ounter Affidavit filed by NTPC on 07.08.2024. Ø Reply of affidavit filed by applica nt on 20.08.202 4. |
| OA no 63/2023/ EZ (158/2023/P B) | NGT, Kolkata | Filed by Shri An up Kumar agains t State of Jharkh and and Others r egarding illegal mining in Pakri Barwadih Coal Mining Project. Vide order dated 11.08.2023, NT PC and its MD O(TSMPL) has been made party by the Hon'ble c ourt. | Next hearing is s cheduled on 12. 11.2024. | Ø Due to similar na ture hearings ar e being held wit h Appeal No 2 0/2023 Ø Last hearing con ducted on 22.0 8.2024. Case o be further heard on 12.11.2024. |
| Appeal No 20/2 023 | NGT, Kolkata | Appeal filed by NTPC against St ate of Jharkhand & Others to stay on DFO's deman d letter for paym ent of Penal NP V with interest i | Next hearing is s cheduled on 12. 11.2024. | Ø 1st hearing done on 01.08.2023. Hon'ble NGT st ayed on DFO's Demand letter. Ø Last hearing con ducted on 22.0 |

| Case No. | Court | Brief | Next date of he aring | Decision of court a nd its compliance |
|-------------------------|-----------------|--|--|---|
| | | n line with MOE F&CC amendme nt letter dated 2 5.05.2023 for a mendment of co ndition no-8 of F C. | | 8.2024, stay continued till further order. |
| W.P.(PIL) 4358/ 2024 | HC of Jharkhand | PIL filed by Shri Ravikant Singh Vs Union of Indi a and others rega rding Mining be yond lease and r egarding FC gra nted to Pakri Bar wadih Coal Mini ng Project on for ged document (Consent letter of Van Prabandhan Samittee). | Next hearing sch eduled on 20.09. 2024 | Ø First Hearing hel d on 28.08.202 4. Ø CA filled by NTP C on 02.09.202 4. |

15.3.4 Traffic assessment study

Traffic study report had been carried for assessment of impacts due to transportation of coal by road from Pakri Barwadih coal mining project to Banadag railway siding. The traffic study has conducted traffic and road surveys for assessment of carrying capacity on route, monitoring of air quality and noise levels along the route, air quality modelling for impact assessment of incremental ground level concentration of air pollutants, data collection regarding flora and opinion survey along the road and identification of villages, forests within 100 m along the route. Based on the existing traffic volume monitored, existing width of roads, traffic projections upto December 2024 and additional trucks from Pakri Barwadih coal mine, the carrying capacity has been calculated for December 2024. The resultant future traffic load will vary between 8.4% to 63.8% of the maximum capacity of the road. To minimise air pollution at the mine and railway sidings, the PP has installed Wind breaker (20' high, 2 km length) along with 10 nos. fixed water sprinklers at Banadag Railway Siding. A mobile water sprinkler has been deployed for the roads. Currently all the trucks / tippers involved in transportation of coal are covered with tarpaulin & stamped. Only Trucks/Tippers with valid PUC certification & fitness certificate and using unadulterated diesel are allowed to ply. Safety measures include installation of speed bumps near settlements, awareness to drivers and local people, deployment of traffic marshals from villages and following a "no horn, low speed" protocol while passing through inhabited stretches and 24 x 7 Ambulance & Crane facility.

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the Committee:

15.3.5: The EAC noted the following:

Recommendations of the Committee:

15.3.6: After deliberations, the Committee **recommended** the proposal for amendment in EC granted

vide file no. J-11015/692/2007-IA.II(M) dated 19.05.2009, as detailed below subject to stipulation of following additional specific conditions. Other terms and conditions prescribed in EC dated 19.05.2009 and its subsequent amendment shall remain unchanged.:

| Reference in EC lette | Description as per ap proved EC | Amendment sought i | Justification/ Remar |
|--------------------------------|---|--|---|
| r dated 19.05.2009 | | n EC | ks |
| Specific Condition N o 2A (ix) | The PP needs to complete the construction of closed belt conveyor system of a length of 1 3 km to Banadag railw ay station. The PP is permitted till 31.10.202 4 to use Service road/State Highways for transportation of coal to Banadag railway siding. | The PP is permitted to use Service Road/ Stat e Highways for transp ortation of 18 MTPA of coal to Banadag rail way siding till 31.12.2 024 and after that 13 MTPA by Belt convey or and 5 MTPA by Service Road/State High ways till 31.03.2026 a dopting all mitigative measure to control dus t pollution. | With regard to the changes in specific condition 2A(ix), Committee is of the opinion to amend specific condition 2A(ix) as follows: "The PP is permitted to use Service Road/State Highway for transportation of 15 MTPA of Coal to Banadag railway siding till 31.12. 2024 adopting all the mitigative measure to control dust pollution." |

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Environment Conditions

3.4.6.1. Specific

| | ditional Specific Conditions |
|----|---|
| 1. | A time bound action plan for transportation of additional 3 MTPA coal as part of expansion of EC dated 06.03.2024 from the Coal Handling Plant (CHP) shall be submitted by 31.10.2024. |
| 2. | Project proponent shall submit a fresh certified compliance report from the concerned Regional Office of the Ministry regarding the compliance of all the stipulated conditions in the exisiting ECs and its subsequent amendments to the Ministry by 31.10.2024. |
| 3. | Audit report of ICFRE regarding the assessment of efficacy of plantations done by the PP shall be submitted by 31.10.2024. |
| 4. | Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route shall be monitored and the data shall be submitted along with the six monthly compliance to the concerned Regional Office and also kept on the web portal of the company. |
| 5. | All the recommendations made in the Traffic Assessment Study Report regarding coal transportation by road shall be strictly adhered with. PP shall install CAAQMS in the villages nearby the coal transportation road in |

| | consultation with the JSPCB. Compliance in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office and also kept on the web portal of the company. |
|----|--|
| 6. | Additional air pollution control measures should be taken along roads being used for transport of coal including e-/CNG/PNG vehicles. |
| 7. | The PP is permitted to use Service Road/State Highway for transportation of 15 MTPA of Coal to Banadag railway siding till 31.12.2024 adopting all the mitigative measure to control dust pollution. |
| 8. | Other terms and conditions prescribed in EC dated 19.05.2009 and its subsequent amendment shall remain unchanged. |

Day 2 -19/09/2024

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Proposed Pathora West Coal Block (Sohagpur Coalfield) has an area of 640.520 ha and Project area 554.0843 ha and targeted Production capacity of 0.80 MTPA (Peak-rated capacity of 1.2 MTPA) located in the Villages of Gh unGhuti, Githauri, and PatnarKalan, Tehsil Pali, District Umaria, and State Madhya Pradesh by M/s. Shri Bajr ang Power and Ispat Limited. by SHRI BAJRANG POWER AND ISPAT LIMITED located at UMARIA, MADH YA PRADESH

| Proposal For | | Fresh ToR | |
|----------------------------|---------------------------------|-----------------|---------------------------|
| Proposa <mark>l No</mark> | File No | Submission Date | Activity (Schedule Item) |
| IA/MP/CMIN/492431/202 4 | IA-J-11015/63/2024-IA-II(M) | 04/09/2024 | Mining of minerals (1(a)) |

3.1.2. Project Salient Features

Agenda No 15.7

15.7: Pathora West Coal Block (Sohagpur Coalfield) (area 554.0843 Ha having capacity 0.8 MTPA) by M/s Shri Bajrang Power and Ispat Limited located at Villages: Gitori, Ghunghuti, Patnarkala; District: Umaria; State: Madhya Pradesh – Prescribing of Terms of Reference – reg.

[Proposal No. IA/MP/CMIN/492431/2024; File No. IA-J-11015/63/2024-IA.II(M); Consultant: Ecomen Mining Pvt. Ltd. Lucknow; NABET/EIA/2022-25/SA 0219, Valid till 22.03.2025 as on 04.09.2024]

15.7.1: M/s. Shri Bajrang Power and Ispat Limited has made an online application for ToR vide proposal no. IA/MP/CMIN/492431/2024 dated 04.09.2024 along with the application in prescribed format Form-I (CAF, Part A and Part B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no 1(a) Under Category "A" (> 500 Ha) of the schedule of the EIA Notification, 2006 and appraised at the Central Level.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussion held during the meeting, are given as under:

15.7.2: The Proposed Pathora West Coal Block (Sohagpur Coalfield)' with an area of 640.520 Ha and Project area 554.0843 Ha and targeted Production capacity of 0.80 MTPA (Peak-rated capacity of 1.2 MTPA) by M/s Shri Bajrang Power and Ispat Limited is located in the Villages of GhunGhuti, Githauri,

and PatnarKalan, Tehsil Pali, District Umaria, and State Madhya Pradesh.

15.7.3: Environmental site settings:

The project area is covered under Survey of India Topo sheet No. F44D3 (64E3). and is bounded by the geographical coordinates with Latitude 23° 21' 0.3940" N to 23° 22' 10.1617" N and Longitude 81° 10' 22.3570" E to 81° 12' 24.7285" E. Project does not fall in the Critically Polluted Area (CPA)/Severely Polluted Area (SPA) as per CEPI Assessment, 2018.

Forest Area: The project involved total 140.8988 Ha of forest land. The details of the approval already obtained are as follows:

| S. No. | Nature of Land involved | Area in Ha | Status of FC/remarks |
|--------|-------------------------|------------|--|
| i. | Non-Forest Land (A) | 404.3965 | - |
| ii. | Forest Land (B) | 140.8988 | Stage I FC applied for 149.6878 Ha area vide proposal no. FP/MP/MI N/QRY/464461/2024 dated 02.03. 2024 |
| iii. | Revenue Forest (C) | 8.789 | |
| | Total Land (A+B+C) | 554.0843 | |

Protected Area: PP submitted that the project is not located within 10 KM of any ESZ/ ESA national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. In case any schedule-I species observed, conservation plan will be prepared for approval from PCCF/CWLW.

15.7.4: Mine lease: The mining block of Pathora West Coal Block, which lies in Sohagpur Coalfield and covers a mining leasehold area of about 554.0843 ha in Umaria District of Madhya Pradesh, has been allocated to M/s Shri Bajrang Power and Ispat Limited via Letter No. NA-104/29/2023-NA dated December 14, 2023, by the MoC, GoI. The original block area allotted to the company was 640.52 ha, but after scrutiny of mining plan by CCO, New Delhi, the project area reduced to 554.0843 Ha. Details of the mine lease submitted by the PP are as follows:

| S. No | Govt. Order/Notifications as the case may be | Area(ha) |
|-------|--|----------|
| 1. | Coal Block Area | 640.520 |
| 2. | Project Area | 554.0843 |
| 3. | Mining Lease Area | 554.0843 |

15.7.5: Mining Plan: PP submitted that Mining Plan along with mine closure plan for Pathora West Coal Block (Sohagpur Coalfield) Project was approved by Ministry of Coal for the capacity 0.80 MTPA (Peak Rated Capacity 1.20 MTPA), area 554.0843 Ha area vide letter dated 28.08.2024.

a. Present land-use and occupancy of pathora west underground coal block

| Sl.No | Description | Area in Ha |
|-------|--------------|------------|
| | Private Land | |

| 1 | Agriculture (including residential houses) | 360.5065 |
|---|--|----------|
| | Township | 0.1210 |
| | Government-non-Forest land | |
| | Agriculture | 5.0650 |
| | Road | 7.3592 |
| 2 | River/nala | 14.5700 |
| | Water Bodies | 4.8040 |
| | Grazing | 8.7288 |
| | Community/others | 3.2420 |
| | Forest Land | |
| 3 | Revenue forest | 8.7890 |
| | Reserve forest | 140.8988 |
| | Total | 554.0843 |

b. Pre-mining Land Use

| S r. n o. | Namer of the villa ges & Forest range | Private Land (in Ha) | Govt. Land (in Ha) | Forest Land (in Ha) | Total area (in Ha) |
|--------------------|--|-------------------------|--------------------|---------------------|--------------------|
| 1. | Githouri | 58.368 | 6.119 | e.Pro | 64.487 |
| 2. | Ghunghuti | 287.4865 | 34.669 | - | 322.1555 |
| 3. | Patnarkala | 25.655 | 0.888 | - | 26.543 |
| 4. | Forest Range Ghun ghuti | - | - | 140.8988 | 140.8988 |
| | Total | | | | 554.0843 |

c. Post Mining

| Sr. No | Description | Area in Ha |
|--------|-------------|------------|
|--------|-------------|------------|

| 1 | UG Entry | UG Entry | |
|---|--|--|---|
| 2 | Top Soil Dump | | 0.8750 |
| 3 | Diversion Or Below River or Nala or Canal | Diversion Or Below River or Nala or Canal | |
| 4 | Settling pond | | 0.2815 |
| 5 | Safety Zone | | 3.4305 |
| 6 | Infrastructure area | | 19.500 |
| 7 | Green Belt | | |
| 8 | Undisturbed Area | c_{q_E} | 503.9824 |
| | | Total | 554.0843 |
| | Proposed change in transportation means if any, give details | n length will be c NH 78 to the infi sed near the incli- tation of coal. An | of about 104 meters is constructed to connect castructure area propose mouth for transportarea of 1.11 ha is proking of coal near the i |

15.7.6: Baseline Studies: Baseline data generated from 1st March to 31st May 2024. PP reported that the Laboratory involved in analysis of water, air, noise & soil quality data, etc. has been accredited by the NABL/ MoEF&CC bearing the Certificate of Accreditation with conformance of ISO 17025:2005 vide no. TC-7470 valid up to 03.10.2026.

15.7.7: Water requirement: PP submitted the estimated water requirement is 773 KLD. Industrial water requirements will be met from existing reservoirs, groundwater, and mine water sources. Potable water requirements will be met from groundwater sources with appropriate treatment.

| S. No. | Purpose | Water Requirement (KL D) | Source |
|-----------|--------------------------------|-----------------------------|-------------------|
| 1 | Mines operation (Machineries) | 550 | Underground Water |
| 2 | Dust Suppression (Surface) | 70 | |
| 3 | Plantation | 81 | |
| 4 | Vehicles Washings & Workshop s | 20 | |

| 5 | Domestic Purpose including surr ounding villages | 52 | Borewell |
|---|--|-----|----------|
| | Total | 773 | |

15.7.8: Solid and hazardous Waste generation: The details of solid and hazardous waste generation along with its mode of treatment/disposal submitted by the PP is furnished as below:

| SI N o | Type of W aste | Source | Quantity (T PA) | Mode of Trea tment | Disposal | Remarks |
|--------------|--------------------------|--|--------------------|---|--|---|
| 1 | Rejection/ overburden | During Mining incline drivages and shaft sinking in the sub-soil and in hard rocks and also from drivages of cross-cuts in hard rock | 804104.8569 cum | The solid wast e produced dur ing these driva ges will be sep arately stacked on the surface and used in e mbankment fo r preparation o f bank heads, f illing of low-l ying areas, de velopment of t he land/road f or infrastructu re, and develo pment of gree nery. | The solid wast e produced dur ing these driva ges will be sep arately stacked on the surface and used in e mbankment for preparation of bank heads, filling of low-lying areas, de velopment of the land/road for infrastructure, and development of greenery. | The liquid waste, like used engin e oil, gear oil, brake o ils, and oth er lubricant s, will be st ored in sep arate tins, d rums, and c ans and sen t to the mai n stores for disposal by to the auth orized recy clers. |

15.7.9: **R&R Plan:** Being Underground Mine, R & R not applicable.

15.7.10: Project Cost: PP submitted the estimated project cost to be Rs. 613.73 Crores. EMP cost shall be Rs. 30.0 Crores and recurring cost shall be Rs. 5.1 Crores.

15.7.11: Geenbelt: The mine area of the project is 554.0843 ha, out of which plantation will be done in a phased manner in an area of 6.0409 ha.

15.7.11: Benefit of the project: Proposed project will provide employment opportunities in the region & local infrastructure including ancillary development and supporting other infrastructure by Project CSR & CER Activity by Shri Bajrang Power and Ispat Limited in the local region.

15.7.12: Legal Issues/ Violation: PP submitted that there is no legal issue/violation w.r.t Environment (Protection) Act, Air (P&CP) Act, Water (P&CP), Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam, Wildlife Protection Act, MMDR Act, and Factories Act. Further, there is no court case against the proposed project.

| 3.] | 1.3 | . I | De | lil | oer | ati | on | S | by | the | con | nmit | tee | in | pr | ev | iou | S | me | eti | in | gs |
|-------------|-----|-----|----|-----|-----|-----|----|---|----|-----|-----|------|-----|----|----|----|-----|---|----|-----|----|----|
|-------------|-----|-----|----|-----|-----|-----|----|---|----|-----|-----|------|-----|----|----|----|-----|---|----|-----|----|----|

| N/A | | | |
|-----|--|--|--|
| | | | |

3.1.4. Deliberations by the EAC in current meetings

Observations and deliberations of the EAC

15.7.13: The Committee noted the following:

Recommendations of the Committee

15.7.14: EAC after detailed deliberations, under the provision of EIA Notification 2006 and as amended, **recommended** the proposal for grant of Terms of Reference (ToR), as applicable to the project, with Public Consultation and following Specific ToR to M/s **Shri Bajrang Power and Ispat Limited** in addition to generic ToR given at Annexure –II for underground mines for preparation of EIA/EMP report for Pathora West Coal Block (Sohagpur Coalfield) (area 554.0843 Ha having capacity 0.8 MTPA) by M/s Shri Bajrang Power and Ispat Limited located at Villages: Gitori, Ghunghuti, Patnarkala; District: Umaria; State: Madhya Pradesh.

3.1.5. Recommendation of EAC

Recommended

3.1.6. Details of Terms of Reference

3.1.6.1. Specific

| Spe | ecific Co <mark>nditions</mark> |
|-----|---|
| 1. | Project proponent shall prepare disaster management plan considering the risk involved in the proposed underground mining. |
| 2. | Project proponent has to prepare the EIA-EMP report based on the valid baseline data and thereafter conduct the Public Consultation (including public hearing), through concerned SPCB in the concerned Districts as per the provisions/procedure contained in the EIA Notification, 2006 (as amended)and OM issued by the MoEF&CC in this regard. |
| 3. | Project Proponent shall submit the detailed activities proposed with year-wise budgetary provisions (Capital and recurring) as per the Ministry's OM dated 30.09.2020, to address the concerns raised during the Public consultation including the public hearing. Activities proposed shall be part of the EMP. |
| 4. | Project proponent shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software. |
| 5. | Project proponent has to Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling. |
| 6. | Impact of underground mining on the environment including underground mine air quality needs to be done by a reputed Government institute. The action plan on recommendation of study with budgetary provision needs to be submitted. |
| 7. | PP has to submit two (02) alternate locations of mine incline and present the environmental details of such sites at time of EC appraisal. |
| 8. | Mine seepage will be monitored and seepage water control measures/management plan shall be developed to ensure the safety of the workers during the underground mining. |
| 9. | Assess the temporal and spatial data for 10 years for surrounding area to show and identify the changes in land use/land cover. |

| 1 0. | As the project involves groundwater intersection a Hydrological study shall be carried out by reputed Government Institute. Further, PP shall comply with the Ministry's OM dated 23.05.2019 and provide necessary details/studies in the EIA/EMP Report. |
|---------|--|
| 1 1. | Project proponent shall submit the drone video & photographs of mined area, fresh lease area to be mined and existing and proposed transportation route. The height and speed of the drone shall be so maintained to give legible images/videos. Necessary titles should be included for better understanding. |
| 1 2. | Project proponent should submit the detailed plan in tabular format (year-wise for life of mine) for concurrent afforestation and green belt development in three tiers by using the native species in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided. |
| 1 3. | Project proponent should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted. |
| 1 4. | Pond rejuvenation plan and plan for water recharge within and outside ML/surrounding area needs to be prepared. The capital and recurring expenditure to be incurred needs to be submitted. |
| 1 5. | PP has to avoid the use of forest land towards North-east (NE) and South-west (SW) part of the mining lease (ML) area. |
| 1 6. | Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged under Environment Management Cell for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted. |
| 1 7. | Project proponent should clearly bring out that what is the specific diesel consumption ~ (Litres/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility and submit strategy of using e-vehicles/cleaner fuel (LNG/CNG) based mining machinery and trucks for mining operations and transportation of men and material and submit a time bound action plan. |
| 1 8. | Project proponent should clearly show the transport route of the mineral and protection and mitigative measures to be adopted while transporting of the mineral. The impact from the centre line of the road/conveyor on either side should be brought out clearly. Based on the above study the compensation to be paid in the event of damage to the crop and land on either side of the road/conveyor needs to be mentioned. |
| 1 9. | All the certificates viz. Involvement of Forest land, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number. |
| 2 0. | Analyse terrestrial/aquatic biodiversity and wildlife studies of the surrounding area and prepare wildlife management plan for the surrounding area. PP has to submit a Certificate from concerned DFO about existence of wildlife corridor adjacent to project site with adequate management plan. |
| 2 | A detailed Wild Life Conservation/Management plan for Schedule 1 species shall be prepared for the conservation |

| 1. | of the species. PP shall ensure that a conservation plan shall be prepared and approved by the CWLW. PP shall obtain the authenticated list of schedule-1 species from the concerned department. |
|---------|--|
| 2 2. | Project proponent shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022. |
| 2 3. | Project proponent shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of the Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs. |
| 2 4. | It should be ensured that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same. |
| 2 5. | Project proponent shall submit the photographs of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyse the samples. |
| 2 6. | A Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions. |
| 2 7. | Details of solar power facility proposed to be installed as energy conservation measures shall be submitted. |
| 2 8. | Project proponent shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero emission by 2050. PP shall update the same to the EAC. |
| 2 9. | Project proponent should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC. |
| 3 0. | Project proponent shall submit the applications for obtaining NOC for the diversion of Road/River/Nallah/Electric lines, if any, passing through the block area to the concerned authority and details shall be provided in EIA Report. No diversion of River/nalah permitted at this stage. |
| 3 1. | Project proponent shall also submit an action plan pursuant to MoEF&CC OM dated 29.10.2014. |
| 3 2. | Project proponent shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget. The EIA report should also include details of STP/ETP to be provided for treatment of domestic and industrial waste water. |
| 3 3. | Heavy metals including other parameters in surface water quality shall be analysed and provided in EIA Report. |
| 3 4. | Project proponent shall assess the environmental impact on schools present inside/surrounding areas and explore possibility for their maximum protection or relocation. A mitigation measures shall be adopted against pollutions around the schools within the lease area in order to safeguard the interest and health of the students. A plan in this regard needs to be submitted. |
| 3 5. | Project proponent shall provide the action plan for the safety of the local people and their cattle from the mining activities by providing fencing and natural wind barrier between the mine infrastructure and settlements etc. shall be a part of such action plan. PP shall ensure to provide right of way to local people and EMP should have provision for the same. |

| 3 6. | Project proponent shall submit time bound action plan to reduce the post-mining void and submit the rejuvenation plan for the ponds within/surrounding the lease area so that it can be used by local people. |
|---------|---|
| 3 7. | Project proponent shall submit a plan to reduce the overburden (OB) generated during underground mining of coal and its deposition outside mining lease (ML) area. |
| 3 8. | Project proponent shall provide the details of the bore wells in the mine lease area and compensation to be paid in case bore wells fails in future due to mining activities. |
| 3 9. | Project proponent shall provide the details of the facilities to be provided to mine workers. |
| 4 0. | Project proponent shall submit a plan for skill development of the Project affected family (PAF) and nearby community so that they are capable enough to get employment/self-employed. |
| 4 1. | Project proponent shall explore use of porta- magazine for explosives, if any. |
| 4 2. | Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5thJune 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report. |

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

| CHATTI BARIATU COAL MINING PROJECT by NTPC MINING LIMITED located at HAZARIBAGH, JHA RKHAND | | | | | | | |
|---|---------------------------|------------------------|-----------------------------|--|--|--|--|
| Proposal For | Profess of | Amendment in EC | | | | | |
| Proposal No | File No | Submission Date | Activity (Schedule Item) | | | | |
| IA/JH/CMIN/493289/2024 | J-11015/133/2007-IA.II(M) | 05/09/2024 | Mining of minerals (1(a)) | | | | |

3.2.2. Project Salient Features

Agenda No. 15.5

15.5: Chatti Bariatu Coal Mining Project (area 646.23 Ha having capacity 7 MTPA) by M/s NTPC Mining Limited located at Villages: Chatti Bariatu, Pagar, Jordag; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/493289/2024; File No. J-11015/133/2007-IA.II(M)]

[Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.5.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 19.04.2010 for Chatti Bariatu Coal Mining Project (area 646.23 Ha having capacity 7 MTPA) and later re-validated vide letter no. J-11015/133/2007-IA.II(M) dated 03.03.2016. Amendments in this EC were accorded vide letter no. J-11015/133/2007-IA.II(M) dated 01.12.2020 & 05.01.2024. Later, this EC was transferred to NTPC Mining Limited vide letter dated 08.03.2024.

Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| S. N o. | Details of Lett er No. | EC/Expansion E C/ Amendment i n EC/ Validity ex tension/ Transfer of EC | Capaci ty (MT PA) | Area (MTP A) | Date of i ssuance | Status of implement ation |
|---------------|-------------------------------|---|-------------------------|---------------------|----------------------|---|
| 1 | J-11015/133/2 007-IA.II(M) | EC | 7 MTP A | 646.23 Ha | 19.04.20 10 | Being Implemented |
| 2 | -do- | Revalidation of E C (due to re-allotme nt of coal block in 2015) | 7 MTP A | 646.23 Ha | 03.03.20 16 | Being Implemented |
| 3 | -do- | Amendment in E C (Road transport p ermission granted till 30.11.2023) | 7 MTP A | 646.23 Ha | 01.12.20 20 | Implemented |
| 4 | -do- | Amendment in E C (Road transport p ermission granted till 31.10.2024 by allowing the const ruction of closed conveyor till 31.1 0.2024 and siding by 31.03.2026) | 7 MTP A | 646.23 Ha | 05.01.20 24 | Implemented |
| 5 | -do- | Transfer in EC (Transfer of EC fr om NTPC Ltd. to NTPC Mining Li mited) | 7 MTP A | 646.23 Ha | 08.03.20 24 | Transfer of EC from NTPC Ltd. NTPC Mi ning Limited. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.5.2: Production Details: PP submitted the actual production details of the concerned mine and

submitted that the mine became operational from 25.04.2022 onwards.

| Year | Actual Coal Production i n MTPA | Planned Coal production in MTPA as per Environ mental Clearance | Excess Production |
|-------------------------------|------------------------------------|---|-------------------|
| 2022-23 | 0.57 | 7 | NIL |
| 2023-24 | 3.3 | 7 | NIL |
| 2024-25 (till 31. 08.2024) | 1.65 | 7 | NIL |

CTO renewal has been obtained from the JSPCB and is valid up to 30.06.2027.

15.5.3: The PP has made an online application vide proposal no. IA/JH/CMIN/493289/2024 dated

04.09.2024 for amendment in EC Specific Condition no. 2A (ix) & (xi) accorded vide letter no. J-11015/133/2007-IA.II(M) dated 19.04.2010, seeking further amendment for extension of timeline to allow transportation of coal by road through covered tippers/ dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori Sidings for supply of coal to Barh STPP and to transport the coal by road to NKSTPP till 31.03.2027. In addition to this, another amendment sought by the PP is to allow the establishment of railway siding by March 2027.

PP submitted the following details for the amendment sought along with the justification:

| Specific/Gener al Condition N o. | Details of Co nditions as p er EC | Amendment Soug ht | Justification |
|--|---|---|---|
| Specific Condit ion No 2A (i x) & (xi) | 2A (ix): "Ra w coal from CHP shall be transported by closed conveyors to the railway siding and from there to linked Barh STPS by rail. There shall be no road transportation of coal". 2A (xi): "Company's Rail way siding shall be established within 3 years from date of grant of environmental clearance" | (a) Change in mode of transportation of coal by road throug h covered tippers/d umpers from mine t o Shivpur, Bachra, Katkamsandi, Kus mahi, Biratoli & To ri Sidings (over a di stance of 26 km, 38 km, 95 km, 81 km, 92 km & 96 km, res pectively) for supply of coal to Barh ST PP and to transport of coal by road to N KSTPP (over a dist ance of 24 km) till 3 1.03.2027. | Delay in construction of Conveyor syst em Pre-requisite to start the construction of CHP is the availability of encumbrance fr ee land that is not available for the entire stretch of coal evacuation corridor of C B&KD. For construction of CHP, NTPC had awarded the contract to M/s L&T on 27.09.2019 immediately after obtaining the St-II forest clearance on 28.08.2019; However, approval of forest land transfer accorded by Govt of Jharkhand only on 2 3.12.2021. Subsequently Tree cutting per mission was received on 08.03.2022. The schedule for construction of CHP is 24 months from the date of front handove r. Land Acquisition and R&R issues alon g the CHP corridor at times have stalled the construction work. Construction work was delayed due to Covid-19 and law & order issue in the area and at times works was stalled by local villagers and even the contractor persons were manhandled. Unfortunately, one executive of a construct ion agency was shot dead on 19.02.2021 by miscreants. Communication to the Nominated Authority regarding the incident had been provided. In the EC amendments dated 05.01.2024 and 05.02.2024 for CB & KD CMP, respectively the time for conveyor construction was granted till 31.10.2024. However, due to difference in the rate of land compensation provided by State Govt to landowners of different villages, physical poss ession of land could not be completed. The conveyor falls in both Hazaribagh and Chatra District. The land compensation r ate paid by Chatra District Administration is less than that paid by the Hazaribagh District Administration. Hence, the landowners in Chatra District demanded at par payment with Hazaribagh and did not all ow the work to start. This matter was disc ussed many times at District Administration and State Govt and also flagged at PM |

| Specific/Gener al Condition N o. | Details of Co nditions as p er EC | Amendment Soug ht | Justification |
|--|---|----------------------|--|
| My e-vo | | -C | G portal. It was deliberated that it is not p rudent to make different payments for the same project activity which may result in IR problems. Hence, it was decided to ac commodate complete conveyor system in Hazaribagh District. Subsequently, re-en gineering of the conveyor system has bee n done with the help of agency to accom modate conveyor system within the Haza ribagh District which further delayed the progress. At present, approx. 73% of con veyor work is completed and the balance work is expected to be completed by De c' 2025. In addition to the above, law and order sit uation in the area is hostile and the follo wing incidents have impacted the construction of the conveyor system: iring of gunshots at NTPC and MDO offici als by unidentified persons hreatening calls to Head of the Project by extremist groups if threats to workmen engaged in construction activities by local villagers branization of Mahjutaan/Mahapanchayat by the local politicians by halting the project activities etting ablaze the machineries by unknown persons etc. Moreover, the tenure of General Lok Sab ha Elections (2024) has resulted in lack of workforce and further, the working hour s have also been reduced to almost six hours/day due to resistance of local Villagers. Status of Railway line connecting conveyor The alternate railway alignment for the S hivpur – Hazaribagh line viz Shivpur – K athautia was finalized subsequently, and survey work started by Railways only in 2022. DPR for the same is under finalization by Railways. This matter is being regularly followed with Railways, Dhanbad Division and ECR, Hajipur. NTPC has al so requested Ministry of Power to co-ordinate with Ministry of Railway siding. During the recent discussion with ECR, Hajipur it is informed that DPR finalization is expected by Oct' 2024. Considering |

| fic/Gener indition N o. | Details of Co nditions as p er EC | Amendment Soug ht | Justification |
|-------------------------------|---|----------------------|--|
| | | | the Land Acquisition, Forest Clearance a nd other construction activities, it will tak e around 30 months from the date of DP R approval on best effort basis. Accordin gly, the work is expected to be completed by March 2027. |

15.5.4: Traffic Assessment Report: Traffic study report has been carried for assessment of impacts due to transportation of coal by road from Chatti Bariatu opencast coal mine project pit head to six railway sidings (Bachra – 38 km, Shivpur – 26 km, Katkamsandi – 95 km, Kusmahi – 81 km, Bira Toli – 92 km and Tori siding – 95 km) and North Karanpura Super Thermal Power Plant (24 km). The present traffic is 896 trucks to and fro towards North Karanpura STPP, Bachra siding and Katkamsandi siding. Additional 416 trucks will move to and fro towards the aforementioned six sidings and North Karanpra STPP. Thus, total 1312 trucks per day will move 19700 TPD of coal from mines. Based on the existing traffic volume monitored, existing width of roads, traffic projections upto March 2027 and additional trucks of Chatti Bariatu coal mine, the carrying capacity has been calculated for March 2027 and two stretches of roads from near Jordag to near Bhadaikhap totalling around 2 km are not having adequate carrying capacity because width of road is only 5 m. Therefore, NTPC Mining Ltd. has constructed a new road bypassing village Bhadaikhap. In addition to this road, PP also needs to complete the construction of road from village Brinda to Shivpur siding. To minimise air pollution at the mine and railway sidings, the PP has installed Wind breaker, installed fixed water sprinkling system & Fixed type rain-guns and undertaken plantation at Katkamsandi Railway Siding. A PM₁₀ analyser has also been installed at Katkamsandi. At Bachra siding mobile water sprinkler has been deployed and wind breakers have been installed all along the Bachra.

- 15.5.5: Details of Court Cases: There are no court cases pending on the said proposal.
- 15.5.6: Monitoring report received from Regional Office, Ranchi: The Ministry is in receipt of monitoring report from Regional Office, Ranchi on 24/09/2024 on the status of compliance of conditions imposed in the EC letter dated 19/04/2010, its revalidation dated 03.03.2016 and amendment in EC dated 05.01.2024 granted by MoEF&CC. As per the said report, following serious partial compliances and non-compliances have been reported by the Regional Office:
- i. Specific condition no.(iii), page no.3; Specific condition no.(xii), page no.6; Specific condition no.(xv), page no.7; additional condition, page no.20: No reclamation of the closed portion of OB dump has been initiated. Therefore, the proponent is instructed to prepare time bound comprehensive plantation plan with native species for protection of the ecology of the surrounding area and post-mining ecological restoration plan and implement on priority
- ii. **Specific condition no.(vi), page no.5:** The retaining wall is under construction. 250 m long retaining wall has already been constructed. Therefore the proponent is instructed to submit time-bound action plan w.r.t the construction of retaining wall to RO Office.
- iii. Specific condition no.(ix), page no.5, Additional condition no.1.1, page no.21: Work for the construction of closed conveyor under progress has been observed. Therefore, the proponent is instructed to complete the work of construction of closed conveyors on priority and submit its progress along with half-yearly compliance report to RO Office.
- iv. **Specific condition no.(xi), page no.6, Additional condition 1.5, page no.22**: Work for the construction of railway siding under progress has been observed. Therefore, the proponent is instructed to complete the work of construction of railway siding on priority and submit its progress along with half-yearly compliance report to RO Office.
- v. Specific condition no.(xiii), page no.7; Specific condition no.(xiv), page no.7; Specific condition no. (xxi), page no. 10; Specific condition no. (xxii), page no 10: Construction of 50 KLD ETP has been observed under construction. No rainwater harvesting measures have been implemented at the project site. Therefore, the proponent, is instructed to complete the construction work of ETP and water harvesting structures on priority and submit its progress report to RO Office.
- vi. Specific condition no (xviii), page no.9, Additional condition 1.13, page no.24: The proponent informed that the implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan has

been entrusted to the State Forest Department. Therefore, the proponent is instructed to submit progress of implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan to RO Office.

- vii. **Specific condition no.** (**xxiv**), **page no.** 11: The proponent informed that these details of environmental activities with expenditure shall be uploaded on the company's website and updated. Therefore, the proponent is instructed to upload details of environmental activities with expenditure on the company's website and submit status to RO Office.
- viii. **Specific condition no (xxv), page no. 11:** The proponent informed that so far the land compensation amount has been paid Rs. 702.66 acres out of 1071.90 acres. A separate Corpus fund of Rs 5 crores will be created in future after displacement and settlement of the PAFs in R&R colony for maintenance of the R&R colony. However, till date no consent has been received from the villages for R&R colony. Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment. Therefore the proponent is instructed to submit action plan for implementation of R&R on priority to RO Office.
- ix. **Specific condition no. (xxvii), page no 12**: The proponent informed that land use pattern shall be prepared for the period 2025- 27 in 2025. Therefore, the proponent is instructed to carry out DS once in three years and the same shall be fumished to RO Office.
- x. General condition no.iii), page no.13; General condition no.iv), page no. 14; General condition no.xv), page no.16: One Continuous Ambient Air Quality Monitoring Station (CAAQMS) to monitor ambient air quality within the mining lease area near Site Office at Pagar. The values on the display of CAAQMS are far lower values hence the proponent was instructed to calibrate the instrument immediately. The display board has not been working on the day of inspection. Therefore, the proponent is instructed to rectify the problem and resume the function of CAAQMS and display board urgently. The proponent is instructed to establish ambient air quality monitoring stations as imposed in the EC and submit details to RO Office.
- xi. **General condition no.ix, page no.15:** The proponent informed that regular training on safety & health has been conducted. However, no details have been received in this Office. Further the proponent informed that the occupational health surveillance has been conducted regularly. However, no details have been received in this Office. Therefore the proponent is instructed to submit details of training and occupational health surveillance to RO Office.
- xii. General condition no.xii, page no.16: No advertised copies have been received in this Office. Therefore, the proponent is instructed to submit advertised copies to RO Office.
- xiii. **General condition no xviii), page no.17:** No environmental statements in the prescribed Form V for the year 2023-2024 have been observed when visited the website. Therefore, the proponent is instructed to submit environmental statement in the prescribed Form V for the year 2023-2024 regularly to this Office and also upload all environmental statements in the prescribed Form V on the company's website.
- xiv. Additional page no. 18: No copy of revalidation of EC No.J-11015/133/2007-IA II(M) dated 03/03/2016 and its compliance status report has been received in RO Office. Therefore, the proponent is instructed to submit copy of revalidation of EC No.J-11015/133/2007- IA.II(M) dated 03/03/2016 and its compliance status report to this Office for further action.
- xv. Additional condition, page no. 19. Additional condition no.1.4. page no.21, Additional condition no.1.6, page no.22, Additional condition no.1.11, page no.22: The proponent informed that the expected timeline for completion of construction of alternate road before December, 2024. Therefore, the proponent is instructed to submit detailed plan for construction of alternate road along with timeline to RO Office.
- xvi. Additional condition no.1.3, page no 22: The proponent informed that all the necessary permissions have been obtained from the Forest Department for the transportation of coal by road through the forest land However, no details of such permission have been received in this Office. Therefore, the proponent is instructed to submit such all details to RO Office.
- xvii. **Additional condition no. 1.7, page no.23**: The trucks used for transportation of coal are optimally loaded and properly covered with tarpaulin to curb pollution. Further, the coal is being transported with all the necessary permission from the State Government. However, no details of such permission have been received in this Office. Therefore, the proponent is instructed to submit such all details to RO Office.
- xviii. **Additional condition no.1.8, page no.23**: The proponent informed that for installment of fog cannons is under the tendering process and shall be completed within 2 or 3 months. At present, the proponent deployed mobile water tankers for dust suppression. Therefore, the proponent is instructed to install 10 fog cannons and submit its status to RO Office.
- xix. Additional condition no.1.9, page no.23: No environmental laboratory has been established at the project

site. Therefore the proponent is instructed to establish environmental laboratory and submit action plan for establishment of environmental laboratory to RO Office.

- xx. Additional condition no.1.10, page no 23: No details of deploy of CNG/LNG/e-vehicles for workers/staff in/out of the mine have been received in this Office. Therefore, the proponent is instructed to submit action plan for deploying CNG/LNG/e-vehicles for workers/staff in/out of the mine to RO Office.
- xxi. **Additional condition no. 1.14, page no.25**: The proponent has not submitted compliance of EC revalidated dated 03/03//2016 therewith half yearly compliance report to this Office. Therefore, the proponent is instructed to clarify for why was not submitting the compliance status of EC revalidated dated 03/03//2016 to RO Office.
- xxii. Additional condition no.1.15, page no.25: The proponent informed that an e-mail request was sent to the Director of Institute of Forest Productivity, Ranchi, Jharkhand, to conduct the studies for evaluating the impact of air pollution generated by the mining activities on the forest up to a distance of about 10 km. Reply is awaited from the Institute of Forest Productivity. Therefore, the proponent is instructed to get study done by the reputed institution/university and submit copy of said study report to RO Office.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

Observations and deliberation of the Committee:

15.5.7: The EAC noted the following:

- i. MoEF&CC has granted EC for Chatti Bariatu Coal Mining Project of M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 19.04.2010 for capacity of 7 MTPA in an area of 646.23 Ha. Later this EC was revalidated vide letter dated 03.03.2016. Subsequently, amendments regarding permission for road transport, for the same were issued vide letters dated 01.12.2020 and 05.01.2024.
- ii. Further, this EC was transferred from M/s NTPC Limited to M/s NTPC Mining Limited vide letter no. J-11015/133/2007-IA.II(M) dated 08.03.2024.
- iii. It is observed that there is 128.92 Ha of forestland involved in the said project and stage II FC is accorded on it vide letter dated 13.04.2017.
- iv. The above project is partly implemented and the mine is already under operation.
- vii. Now, the PP has submitted the proposal for amendment in Specific Condition no. 2A(ix) & (xi) of EC vide letter dated 19.04.2010 (last amended vide EC letter dated 05.01.2024), regarding the change in mode of transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori Sidings (over a distance of 26 km, 38 km, 95 km, 81 km, 92 km & 96 km, respectively) for supply of coal to Barh STPP and to transport of coal by road to NKSTPP (over a distance of 24 km) till 31.03.2027 instead of 31.10.2024 and 31.03.2026 respectively.
 - The Committee deliberated on the same observed that the length of conveyor has been declined and that of railway siding has been increased due to the non-availability of land. The PP also submitted that it is being re-engineered and terrain of the same is also being changed. The Committee also observed that there are major changes in transportation route vis-a-vis with transportation route envisaged under the EC dated 19/04/2010.
- viii. PP submitted that in order to start with the construction of CHP, encumbrance free land is required which was not available for the entire stretch of coal evacuation corridor. Hence, contract for construction of CHP could be awarded only after the grant of Stage II FC, approval of forestland transfer by Govt of Jharkhand and tree cutting permission, which were accorded on 28.08.2019, 23.12.2021 and 08.03.2022 respectively.
 - Thereafter, land acquisition and R&R issues along with the CHP corridor many a times has stalled the construction work and later COVID-19 and law and order issues of the area further delayed the same. Considering the same, EC amendment was accorded vide letters dated 01.12.2020 and 05.01.2024.
- ix. PP also submitted that law and order situation in the area is hostile and several incidents like firing of gunshots NTPC and MDO officials by unidentified persons, threatening calls to head of the project by extremist groups, life threats to workmen engaged in construction activities by local villagers, organization of Mahjutaan/Mahapanchayat by the local politicians by halting the project activities & setting ablaze the machineries by unknown persons etc, have impacted construction of conveyor system.

Moreover, due to political instability there is lack of workforce and working hours are also reduced to 6 hours/ day due to resistance of local villagers.

- x. In pursuance to status of railway line connecting the conveyor (specific condition no. 2A (xi)), PP submitted that survey work for the alternate railway alignment for Shivpur Hazaribagh line viz Shivpur Kathautia was started in 2022 only. Daily Progress Report for the same is under finalization by railways and the matter is being regularly followed-up with railways. PP further submitted that considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027.
- xi. The Committee deliberated on the condition of the roads through which transportation of coal being done currently. The Committee observed that at some places road is passing through forest area. The Committee asked PP to submit a certificate from DFO certifying that no elephant corridor passes through the coal transportation road. Committee also asked the PP to submit a drone video of the roads through which coal is being transported.
- xii. The Committee also deliberated on the air quality monitoring data of the coal transportation roads and observed that the air quality prediction models show levels of pollution almost near the permissible limits, hence high level of pollution, that too away from the coal transportation road. The Committee is of the opinion that this might exceed the annual permissible limits. The Committee therefore, has asked PP to submit a time bound action plan for the mitigation measures to be adopted to control the high level of air pollution along with the budget proposed for the same.
- xiii. The Committee also deliberated on the plantation activities done by the PP since the mine is operational and observed that plantation is developed only on the 8 Ha land area. Also, there is no road side plantation observed. PP submitted that plantation drives are being carried out and recently they have also launched the "Ek Ped Maa K Naam" campaign in the villages falling in the purview of lease area. The Committee is of the opinion that the PP must submit a plantation plan along the road side along with the estimated budget for the same.
- xiv. The Committee observed that due to no entry during day time, at some places, transportation of coal by road will take place at night. The Committee deliberated on the noise pollution and air pollution mitigation measures to be adopted in this regard and asked the PP to submit air quality and noise level monitoring data of both during day and night time of the public roads being used for haulage. The air quality monitoring data presented by the PP was for locations not exactly on the road side due to which proper appraisal could not be done.
- xv. The Committee also deliberated on the Traffic Assessment Study carried out by the PP and observed that issues such as air quality and noise level monitored data of both during day and night time of the public roads being proposed for road transportation, incremental impact on the environmental attributes due to road transportation and man-animal conflict during transportation of coal etc. have not been adequately addressed in the study report.
 - xvi. The Committee taken in to cognizance the partial compliances and non-compliances reported by the Regional Office of the Ministry in its monitoring report as mentioned at para no. 15.5.6.
- xvii. The Committee observed that conveyor which is under construction for which the extension in timeline is being sought is the common conveyor for the adjoining Kerandari Coal Mine. Both mines are adjacent to each other and the issues are common. The latter is also placed in the same meeting for seeking amendment in the timeline same as that of the instant proposal (Chatti Bariatu Coal Mining Project).

Recommendations of the Committee:

- **15.5.8:** In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal for amendment in EC granted by vide file no. J-11015/133/2007-IA.II(M) dated 19.04.2010 and sought for following additional information for further consideration:
- i. Action taken report on the partial compliances and non-compliances reported by the Regional Office in its monitoring report shall be submitted by the proponent to the concerned RO, MoEF&CC to obtain their views/comments and the same shall be further submitted to the EAC for further consideration.
- ii. Revised traffic assessment study report inter-alia covering the following shall be submitted:
 - a. Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route i.e., from mine pit head to six railway sidings and North Karanpura TPP during day and night time.
 - b. Anticipated impact on all environmental attributes
 - c. Environmental Management Plan including monitoring program to address all concerns arising out of coal transportation by road

- iii. Certificate from DFO shall be submitted stating that coal transport route does not intersect with wildlife corridors.
- iv. Drone video of the entire coal transportation route by road shall be submitted.
- v. No overburden dumping should be done outside the ML area.
- vi. Action plan for reducing the coal transportation by road in a time bound manner.

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

3.2.5. Recommendation of EAC

Deferred for ADS

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

| KERANDARI COAL MINING PROJECT by NTPC MINING LIMITED located at HAZARIBAGH, JHARKHA ND | | | | | |
|--|--|-----------------|-----------------------------|--|--|
| Proposal For | KIN | Amendment in EC | | | |
| Proposal No | File No | Submission Date | Activity (Schedule Item) | | |
| IA/JH/CMIN/493281/2024 | J-11015/133/2 <mark>007-JA</mark> .II(M) | 05/09/2024 | Mining of minerals (1(a)) | | |

3.3.2. Project Salient Features

Agenda No. 15.6

15.6: Kerandari Coal Mining Project (area 1173 Ha having capacity 6 MTPA) by M/s NTPC Mining Limited located at Villages: Pandu, Pagar, Basaria, Lochar, Baledori, Kabed, Tarhesa; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/493281/2024; File No. J-11015/133/2007-IA.II(M)]

[Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.6.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M) dated 31.03.2010 for Kerandari Opencast Coal Mining Project (area 1173 Ha having capacity 6 MTPA). Amendment in this EC was accorded vide letter dated 05.02.2024. Later this EC was transferred to M/s NTPC Mining Limited vide letter dated 08.03.2024.

It is to be noted that allocation of Kerandari Coal Block along with 203 other coal blocks was cancelled by the Hon'ble Supreme Court vide Judgement dated 25.08.2014 read with Order dated 24.09.2014. Vide allotment order no. 103/29/2015/NA dated 08.09.2015, re-allocated the Kerandari 'A' coal block (area 1173 Ha having capacity of 6 MTPA) to M/s NTPC Limited. Thereafter, Revalidation/transfer of EC of the said block was granted to NTPC Limited vide letter dated 28.10.2015.

Details of all the ECs including its amendment are summarized as below:

| S. N o. | Details of Lett er No. | EC/Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC | Capaci ty (MT PA) | Area (MTP A) | Date of i ssuance | Status of implem entation |
|---------|-------------------------------|---|-------------------------|---------------------|-------------------|---------------------------|
| 1 | J-11015/133/2 007-IA.II(M) | EC | 6 MTP A | 1173 H a | 31.03.20 10 | Being Implement ed |

| S. N o. | Details of Lett er No. | EC/Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC | Capaci ty (MT PA) | Area (MTP A) | Date of i ssuance | Status of implem entation |
|---------------|---------------------------|---|-------------------------|---------------------|----------------------|---|
| 2 | -do- | Revalidation/ Transf er of EC | 6 MTP A | 1173 H a | 28.10.20 15 | Being Implement ed |
| 2 | -do- | Amendment in EC (Road transport grant ed till 31.10.2024) | 6 MTP A | 1173 H a | 05.02.20 24 | Being Implement ed |
| 3 | -do- | Transfer of EC | 6 MTP A | 1173 H a | 08.03.20 24 | Transferred from M/s NTPC Ltd to M/s NTPC Minin g Ltd |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.6.2: Production Details: PP submitted the actual production details of the concerned mine and submitted that the mine became operational from 05.04.2023 onwards.

Details of the same are as follows:

| Ye | | | Planned Coal production in MT PA as per Environmental Cleara nce | Excess Production |
|--------|-----------------|------|--|-------------------|
| 2023-2 | .024 | 0.02 | 2 | NIL |
| | 5 (as o 05.09.2 | 0.04 | 4 | NIL |

CTO renewal has been obtained from the SPCB and is valid up to 30.06.2025.

15.6.3: The PP has made an online application vide proposal no. IA/JH/CMIN/4932891/2024 dated 04.09.2024 for amendment in EC Specific Condition no. 2A (xi) & (xiv) accorded vide letter no. J-11015/133/2007-IA.II(M) dated 31.03.2010, seeking further amendment for extension of timeline to allow transportation of coal by road through covered tippers/ dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori railway sidings for supply of coal to Tanda STPP and to transport the coal by road to NKSTPP till 31.03.2027. In addition to this, another amendment sought by the PP is to allow the establishment of railway siding by March 2027.

PP submitted the following details for the amendment sought along with the justification:

| Specific/Gener al Condition N o. | Details of Co nditions as p er EC | Amendment Soug ht | Justification |
|---|--|---|---|
| Specific Condit ion No 2A (x i) & (xiv) | EC Sp. Cond. No 2A(xi) Ra w coal from CHP shall be transported b y closed conv eyors to the r ailway siding proposed at v illage Khada | Change in mode of transportation of co al by road through c overed tippers/dum pers from mine to S hivpur, Bachra, Kat kamsandi, Kushma hi, Bira Toli & Tori railway sidings for s upply of coal to Tan | Delay in construction of Conveyor syst em Pre-requisite to start the construction of CHP is the availability of encumbrance fr ee land that is not available for the entire stretch of coal evacuation corridor of CB&KD. For construction of CHP, NTPC had awarded the contract to M/s L&T on 27.09.2019 immediately after obtaining t he St-II forest clearance on 28.08.2019; |

| Specific/Gener al Condition N o. | Details of Co nditions as p er EC | Amendment Soug ht | Justification |
|--|---|----------------------|---|
| al Condition N | nditions as p | _ | However, approval of forest land transfer accorded by Govt of Jharkhand only on 2 3.12.2021. Subsequently Tree cutting per mission was received on 08.03.2022. The schedule for construction of CHP is 24 months from the date of front handove r. Land Acquisition and R&R issues alon g the CHP corridor at times have stalled t he construction work. Construction work was delayed due to Covid-19 and law & order issue in the area and at times works was stalled by local villagers and even th e contractor persons were manhandled. U nfortunately, one executive of a construct ion agency was shot dead on 19.02.2021 by miscreants. Communication to the No minated Authority regarding the incident had been provided. In the EC amendments dated 05.01.2024 and 05.02.2024 for CB & KD CMP, resp ectively the time for conveyor construction was granted till 31.10.2024. However, due to difference in the rate of land comp ensation provided by State Govt to lando wners of different villages, physical poss ession of land could not be completed. The conveyor falls in both Hazaribagh and Chatra District, and the land is acquired u nder LA Act 1894. The land compensation rate paid by Chatra District Administrat ion is less than that paid by the Hazaribagh District Administration and State Govt and also flagged at PMG portal. It was deliberated that it is not prudent to make different payments for the same project activity which may result in IR problems. Hence, it was decided to accommodate complete conveyor system in Hazaribagh District. Subsequently, reengineering of the conveyor system has |
| | ways for tran sportation of coal to Banad ag railway si ding. | | been done with the help of agency to acc ommodate conveyor system within the H azaribagh District which further delayed t he progress. At present, approx. 73% of conveyor work is completed and the bala nce work is expected to be completed by Dec' 2025. In addition to the above, law and order sit uation in the area is hostile and the follo |

| wing incidents have impacted the construction of the conveyor system: Firing of gunshots at NTPC and MDO office als by unidentified persons Threatening calls to Head of the Project by a tremist groups Life threats to workmen engaged in construction activities by local villagers Organization of Mahjutaan/Mahapanchaya by the local politicians by halting the project ect ectivities Setting ablaze the machineries by unknown persons etc. Moreover, the tenure of General Lok Sal ha Elections (2024) has resulted in lack of f workforce and further, the working hours have also been reduced to almost six hours/day due to resistance of local villagers. Status of Railway line connecting conveyor The alternate railway alignment for the Shiypur – Hazaribagh line viz Shiypur – Kathautia was finalized subsequently, and survey work started by Railways only in 2022. DPR for the same is under finalization by Railways. This matter is being regularly followed with Railways, Dhanbac Division and ECR, Hajipur. NTPC has a so requested Ministry of Power to co-ord nate with Ministry of Railways for expectitions construction of Railway siding. During the recent discussion with ECR Hajipur it is informed that DPR finalization is expected by Oct 2024. Considering the Land Acquisition, Forest Clearance and other construction activities, it will tale around 30 months from the date of DR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027. |
|--|

15.6.4: Traffic Assessment Report: Traffic study report has been carried for assessment of impacts due to transportation of coal by road from Kerandari 'A' opencast coal mine project pit head to six railway sidings (Bachra – 40.5 km, Shivpur – 28.8 km, Katkamsandi – 97.6 km, Kusmahi -83.3 km, Bira Toli -94.6 km and Tori siding – 97.9 km) and North Karanpura Super Thermal Power Plant – 26.3 km. Based on the existing traffic volume monitored, existing width of roads, traffic projections upto March 2027 and additional trucks of Kerandari 'A' coal mine, the carrying capacity has been calculated for March 2027 and two stretches of roads from near Jordag to near Bhadaikhap totalling around 2 km are not having adequate carrying capacity because width of road is only 5 m. Therefore, NTPC Mining Ltd. has constructed a new road bypassing village Bhadaikhap. In addition to this road, PP also needs to complete the construction of road from village Brinda to Shivpur siding. To minimise air pollution at the mine and

railway sidings, the PP has installed Wind breaker, installed fixed water sprinkling system & Fixed type rain-guns and undertaken plantation at Katkamsandi Railway Siding. A PM_{10} analyser has also been installed at Katkamsandi. At Bachra siding mobile water sprinkler has been deployed. Wind breakers have been installed all along the Bachra and Tori siding as well.

- **15.6.5: Details of Court Cases:** There are no court cases pending on the said proposal.
- **15.6.6:** Monitoring report received from Regional Office, Ranchi: on the status of compliance of conditions imposed in the EC letter dated 31/03/2010, transfer/ revalidation of EC dated 03.03.2016 and amendment in EC dated 05.02.2024 granted by MoEF&CC. As per the said report, following glaring partial compliances and non-compliances have been reported by the Regional Office:
- i. **Status of EC, page no.2:** No copy of transfer revalidation of EC No.J-11015/120/2007-IA.II(M) dated 28/10/2015 and all copies of CTES/CTOs have been received in RO Office. Therefore the proponent is instructed to submit transfer / revalidation of EC No.J- 11015/120/2007-IA II(M) dated 28/10/2015 and all copies of CTES/CTOS to RO Office.
- ii. **Specific condition no.ii, page no.2:** The proponent informed that State Water Resources Department vide letter dated 19/3/2013 approved for the diversion of Baldeori nala, which is yet to be diverted. Therefore, the proponent is instructed to submit time bound plan for the diversion of Baldeori nala and construction of embankment, details of plantation, etc., to RO office.
- iii. Specific condition no.iv, page no.3; Specific condition no.xii, page no.7; Specific condition no.xxiii, page no.9; Specific condition no.xxi, v page no.10: No reclamation of the closed portion of OB dump has been initiated. Therefore, the proponent is instructed to prepare time bound comprehensive plantation plan with native species for protection of the ecology of the surrounding area and post-mining ecological restoration plan. The proponent should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The proponent should submit the number of saplings to be planted, area to be covered under afforestation and green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this, the proponent should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided. In addition to this, plantation in the safety zone at lease boundary the plantation should be planned in such a way that it should be completed within 2 years only.
- iv. **Specific condition no.viii, page no.5**: No retaining wall has been observed. Therefore, the proponent is instructed to submit the comprehensive action plan for the construction of retaining wall to RO Office.
- v. Specific condition no.xiii, page no.5, Additional condition no.1.1, page no.20: Crushers are yet be constructed. The proponent informed that the optimum loaded tarpaulin covered trucks have used for transportation of coal. Mobile water tankers have been deployed for dust suppression along the transportation route. Therefore, the proponent is instructed to complete the construction of crushers on priority and submit detailed timeline for the construction crushers at CHP to RO Office.
- vi. Specific condition no xiv, page no.6, Additional condition no.1.6, page no.21; Additional condition no.1.8. page no.21: Work for the construction of railway siding under progress has been observed. The proponent informed that the amendment in EC has been obtained from MoEF&CC vide letter dated 05/01/2024 for completing the for construction of railway siding by March 2025 and construction of closed belt conveyor upto October, 2024. Therefore, the proponent is instructed to complete the work of construction of railway siding on priority and submit its progress report to RO Office.
- vii. **Specific condition no.xvii, page no.8; Specific condition no xxi, page no.8:** No rainwater harvesting structures have been observed in the mine premise. The proponent informed that the rainwater harvesting structures shall be established within 2 or 3 months. The water requirement of the nearby villages shall be met in case the village wells go dry due to dewatering of mine. Therefore, the proponent is instructed to construct rainwater harvesting structures in consultation with CGWA/ State Water Resources Department and submit its detail to RO Office.
- viii. Specific condition no.xix, page no.8; Specific condition no.xxii, page no.9; General condition no.vi, page no. 15: ETP without oil/grease traps on has been constructed. Therefore, the proponent is instructed to install oil/grease traps on priority and submit action taken report to RO Office.
- ix. **Specific condition no.xx, page no.8:** No STP has been provided. Therefore the proponent is instructed to provide STP on priority basis and submit action taken report to RO Office.

- x. **Specific condition no xxv, page no.10:** Wildlife Conservation Plan and Site-Specific Wildlife Management Plan have been prepared and approved by the State Chief Wildlife Warden. Copies of plans have been received in this Office. It was informed that for implementation of site- specific wildlife management plan Rs. 24.76 Crores was deposited in the ad-hoc CAMPA account. Therefore, the proponent is instructed to submit progress report of implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan to RO Office.
- xi. **Specific condition no xxvi, page no.11**: The proponent earmarked separate budget for implementing environmental measures. The details of expenditure on environmental activities for FY 2023- 2024 have not been received in RO Office. The proponent informed that these details of activities with expenditure shall be uploaded on the company's website and updated. Therefore, the proponent is instructed to upload details of environmental activities with expenditure on the company's website and submit status to RO Office.
- xii. **Specific condition no.xxvii, page no. 11:** Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment. Therefore, the proponent is instructed to submit action plan for implementation of R&R on priority to RO Office.
- xiii. **Specific condition no.xxxi, page no. 12:** The proponent informed that land use pattern shall be prepared for the period 2025-27 in 2025. Therefore, the proponent is instructed to carry out DS once in three years and the same shall be furnished to RO Office.
- xiv. **General condition no.iii**, page no.13; General condition no.vili, page no. 15, General condition no.xv, page no. 17: No four ambient air quality monitoring stations have been established. However, one Continuous Ambient Air Quality Monitoring Station (CAAQMS near Site Office has been installed and. The values on the display of CAAQMS are far lower values hence the proponent was instructed to calibrate the instrument immediately. The display board has not been working on the day of inspection. Therefore, the proponent is instructed to rectify the problem and resume the 3 Page function of CAAQMS and display board urgently. The proponent is instructed to establish ambient air quality monitoring stations as imposed in the EC and submit details to RO Office.
- xv. General condition no.ix, page no. 16: The proponent informed that regular training on safety & health has been conducted. However, no details have been received in this Office. Further the proponent informed that the occupational health surveillance has been conducted regularly. However, no details have been received in this Office. Therefore the proponent is instructed to submit details of training and occupational health surveillance to RO Office.
- xvi. General condition no.xii, page no.16: No advertised copies have been received in this Office. Therefore, the proponent is instructed to submit advertised copies to RO Office.
- xvii. **General condition no.xviii, page no. 18**: No environmental statements in the prescribed Form V for the year 2023-2024 have been observed when visited the website. Therefore, the proponent is instructed to submit environmental statement in the prescribed Form V for the year 2023-2024 regularly to RO Office and also upload all environmental statements in the prescribed Form V on the company's website Office.
- xviii. Additional condition no. 1.14, page no.23: No copy of transfer / revalidation of EC No.J-11015/133/2007-IA.II(M) dated 28/10/2015 and its status of compliance has been received in this Office. Therefore the proponent is instructed to copy of copy of transfer / revalidation of EC No.J-11015/133/2007-IA.II(M) dated 28/10/2015 and its status of compliance to RO Office.
- xix. Additional condition no. 1.9, page no.21: The proponent informed that for instalment of fog cannons is under the tendering process and shall be completed within 2 or 3 months. At present, the proponent deployed mobile water tankers for dust suppression. Therefore, the proponent is instructed to install 10 fog cannons and submit its status to RO Office.
- xx. Additional condition no. 1.11. page no.22: The proponent informed that there are no CNG/LNG/recharge stations located near the mine site. BS VI tippers have been used for transportation of coal to minimize the emissions. No details of deploy of CNG/LNG/e-vehicles for workers/staff in/out of the mine have been received in this Office. Therefore, the proponent is instructed to submit action plan for deploying CNG/LNG/e-vehicles for workers/staff in/out of the mine to RO Office.
- xxi. Additional Condition no. 1.12, page no. 22: No details of engage the State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market have been received in this Office. Therefore, the proponent is instructed to submit progress of implementation of Wildlife Conservation Plan along with details of expenditure and details of engage the State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market to RO office.
- xxii. Additional condition no. 1.15, page no 23: No Copy of study on evaluating the impact of air pollution generated by its activities on the forests upto a distance of about 10 km have been received in this Office.

Therefore, the proponent is instructed to get study done by the reputed institution/ university and submit copy of said study report to RO office.

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

Observations and deliberation of the Committee:

15.6.7: The EAC noted the following:

- i. MoEF&CC has granted EC for Kerandari Opencast Coal Mining Project of M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 31.03.2010 for capacity of 6 MTPA in an area of 1173 Ha. Later this EC was revalidated/ transferred vide letter dated 28.10.2015 (since it was de-allocated vide the Judgement of Hon'ble Supreme Court and then further re-allocated vide allotment order MOC to M/s NTPC Limited). Further, amendment in EC was granted to permit the transportation of coal by road till 31.10.2024 vide letter dated 05.02.2024 and later this EC was transferred to M/s NTPC Mining Limited vide letter dated 08.03.2024.
- ii. The above project is partly implemented and is already under operation.
- iii. It is observed that the said project involves 243.32 Ha of forestland and stage II on the same was accorded vide letter dated 28.08.2019.
- iv. Specific Condition no. 2A (xi) of EC stipulated that the raw coal from CHP shall be transported by closed conveyors to the railway siding proposed at village Khadamdari and thereafter by rail to the linked Tanda/ Barh STPP. The conveyor-cum-rail corridor consisting of a stretch of 13.1 km of rail and 10.5 km of overhead closed conveyors and extend upto unloading part at the railway siding with Silo Loading facilities and from there to the linked Barh STPS/ Tanda by rail. There shall be no road transportation of coal. The timeline for the same was extended until 31.10.2024 (for construction of closed conveyor) vide EC amendment dated 05.02.2024.
- v. Specific Condition no. 2A (xiv) of EC stipulated that the company's railway siding at village Khadambari shall be established within 3 years from date of grant of EC. The timeline for the same was extended until 31.03.2025 (for construction of railway siding) vide EC amendment dated 05.02.2024.
- vi. Now, the PP has submitted the proposal for amendment in Specific Condition no. 2A(xi) & (xiv) of EC vide letter dated 31.03.2010 (last amended vide EC letter dated 05.02.2024), regarding change in mode of transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Katkamsandi, Kushmahi, Bira Toli & Tori railway sidings for supply of coal to Tanda STPP and transport of coal by road to NKSTPP till 31.03.2027 instead of 31.10.2024 and 31.03.2025 respectively. The Committee deliberated on the same observed that the length of conveyor has been declined and that of railway siding has been increased due to the non-availability of land. The PP also submitted that it is being re-engineered and terrain of the same is also being changed.
- vii. PP submitted that in order to start with the construction of CHP, encumbrance free land is required which was not available for the entire stretch of coal evacuation corridor. Hence, contract for construction of CHP could be awarded only after the grant of Stage II FC, approval of forestland transfer by Govt of Jharkhand and tree cutting permission, which were accorded on 28.08.2019, 23.12.2021 and 08.03.2022 respectively.
 - Thereafter, land acquisition and R&R issues along with the CHP corridor many a times has stalled the construction work and later COVID-19 and law and order issues of the area further delayed the same. Considering the same, EC amendment was accorded vide letter dated 05.02.2024.
- viii. PP also submitted that law and order situation in the area is hostile and several incidents like firing of gunshots NTPC and MDO officials by unidentified persons, threatening calls to head of the project by extremist groups, life threats to workmen engaged in construction activities by local villagers, organization of Mahjutaan/ Mahapanchayat by the local politicians by halting the project activities & setting ablaze the machineries by unknown persons etc, have impacted construction of conveyor system. Moreover, due to political instability there is lack of workforce and working hours are also reduced to 6 hours/ day due to resistance of local villagers.
- ix. In pursuance to status of railway line connecting the conveyor (specific condition no. 2A (xiv)), PP submitted that survey work for the alternate railway alignment for Shivpur Hazaribagh line viz Shivpur –

Kathautia was started in 2022 only. Daily Progress Report for the same is under finalization by railways and the matter is being regularly followed-up with railways, Dhanbad Division and ECR, Hajipur. PP further submitted that considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027.

- x. The Committee deliberated on the condition of the roads through which transportation of coal being done currently. The Committee observed that at some places road is passing through forest area. The Committee asked PP to submit a certificate from DFO certifying that no elephant corridor passes through the coal transportation road. Committee also asked the PP to submit a drone video of the roads through which coal is being transported.
- xi. The Committee also deliberated on the air quality monitoring data of the coal transportation roads and observed that the air quality prediction models show levels of pollution almost near the permissible limits, hence high level of pollution, that too away from the coal transportation road. The Committee is of the opinion that this might exceed the annual permissible limits. The Committee therefore, has asked PP to submit a time bound action plan for the mitigation measures to be adopted to control the high level of air pollution along with the budget proposed for the same.
- xii. The Committee also deliberated on the plantation activities done by the PP since the mine is operational and observed that plantation developed till now is not adequate. Also, there is no road side plantation observed. PP submitted that plantation drives are being carried out and recently they have also launched the "Ek Ped Maa K Naam" campaign in the villages falling in the purview of lease area. The Committee is of the opinion that the PP must submit a plantation plan along the road side along with the estimated budget for the same.
- xiii. The Committee observed that due to no entry during day time, at some places, transportation of coal by road will take place at night. The Committee deliberated on the noise pollution and air pollution mitigation measures to be adopted in this regard and asked the PP to submit air quality and noise level monitoring data of both during day and night time of the public roads being used for haulage. The air quality monitoring data presented by the PP was for locations not exactly on the road side due to which proper appraisal could not be done.
- xiv. The Committee also observed that OB dumping is being done outside the ML area (in the adjoining mine lease area, i.e., Chatti Bariatu Mine lease) and is of the opinion that the same should be immediately stopped and should be restricted to ML area only.
- xv. The Committee also deliberated on the Traffic Assessment Study carried out by the PP and observed that issues such as air quality and noise level monitored data of both during day and night time of the public roads being proposed for road transportation, incremental impact on the environmental attributes due to road transportation and man-animal conflict during transportation of coal etc. have not been adequately addressed in the study report.
- xvi. The Committee taken in to cognizance the partial compliances and non-compliances reported by the Regional Office of the Ministry in its monitoring report as mentioned at para no.15.6.6.
- xvii. The Committee observed that conveyor which is under construction for which the extension in timeline is being sought is the common conveyor for the adjoining Chatti Bariatu Coal Mining Project. Both mines are adjacent to each other and the issues are common. The latter is also placed in the same meeting for seeking amendment in the timeline same as that of the instant proposal (Kerandari Coal Mining Project).

Recommendations of the Committee:

- **15.6.8:** In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal for amendment in EC granted vide file no. -11015/133/2007-IA.II(M) dated 31.03.2010 and sought for following additional information for further consideration:
- i. Action taken report on the partial compliances and non-compliances reported by the Regional Office in its monitoring report shall be submitted by the proponent to the concerned RO, MoEF&CC to obtain their views/comments and the same shall be further submitted to the EAC for further consideration.
- ii. Revised traffic assessment study report inter-alia covering the following shall be submitted:
 - a. Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route i.e., from mine pit head to six railway sidings and North Karanpura TPP during day and night time.
 - b. Anticipated impact on all environmental attributes
 - c. Environmental Management Plan including monitoring program to address all concerns arising out of coal transportation by road
- iii. Certificate from DFO shall be submitted stating that coal transport route does not intersect with wildlife corridors.

- iv. Drone video of the entire coal transportation route by road shall be submitted.
- v. No overburden dumping should be done outside the ML area.
- vi. Action plan for reducing the coal transportation by road in a time bound manner.

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

3.3.5. Recommendation of EAC

Deferred for ADS

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Proposed Gondkhari Underground Coal Mine (Kamptee Coalfield) of area 862.00 Ha, Targeted capacity – 2.0 M TPA, at Village – Gondkhari, Tehsil – Kalmeshwar, Dist. – Nagpur, State – Maharashtra - 440023 by ADANI PO WER MAHARASHTRA LIMITED located at NAGPUR, MAHARASHTRA

| Proposal For | | Amendment in EC | |
|----------------------------|----------------------------------|-----------------|-----------------------------|
| Proposal No | File No | Submission Date | Activity (Schedule Item) |
| IA/MH/CMIN/495430/202 4 | IA-J-11011/46/2022-IA. II(M) | 05/09/2024 | Mining of minerals (1(a)) |

3.4.2. Project Salient Features

Agenda No. 15.8

15.8: Gondkhari Underground Coal Mine (Kamptee Coalfield) (area 862 Ha having targeted capacity 2 MTPA) by M/s Adani Power Maharashtra Limited located at Villages: Waddhamana, Gondkhari, Pendhari, Kalameshwar, Nagpur (rural); District: Nagpur; State: Maharashtra – Amendment in EC –reg.

[Online Proposal No. IA/MH/CMIN/495430/2024; File No. J-11011/46/2022-IA.II(M)]

[Consultant: Vardan Environet LLP NABET/EIA/2326/RA0284 valid up to 04/05/2026]

15.8.1: The instant proposal is for amendment in Environment Clearance granted to M/s Adani Power Maharashtra Limited vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 for Gondkhari Underground Coal Mine (area 862 Ha having targeted capacity 2 MTPA) regarding change in infrastructure location within mine lease area, mainly mine entries through inclines and ventilation shaft. Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| Sl. No. | Details of Le tter No | EC/Expansion EC/Amendmen t in EC/Validity extension/Tran sfer of EC | Capacity (MTPA) | Area (Ha) | Date of Is suance | Status of Implementati on |
|------------|--------------------------------------|---|--------------------------|--------------|-------------------|--|
| 1. | IA-J-11011/4 6/2022-IA. I I(M) | Environmental Clearance | 2/3 (Normativ e/Peak) | 862 | 02.02.202 | Project activit y is yet to co mmence at the site. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.8.2: The PP has made an online application vide proposal no. IA/MH/CMIN/495430/2024 dated 05.09.2024 for amendment in "EC Miscellaneous Condition no. 9.9" and "EC particulars s. no. 2 (iii) – Clearance type" accorded vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024.

| Specific/General Condition no. | Details of Conditions as per EC | Amendment Soug ht | Justification |
|---|--|---|--|
| 9. Miscellaneous | 9.9 – No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC). | Change in infrastr ucture location wit hin mine lease are a, mainly mine ent ries through inclin es and ventilation s haft. | 1. Change in location of lan d: a. Air return shaft land was shi fted from Khasra No. 236 private land to Khasra No. 274 private land due to iss ues in land availability. b. Incline land was shifted from Khasra No. 104, 106, 109 & 110 private land to Khasra No. 96 due to flatten the incline gradient and issues in land availability. c. The location of the Incline mouth and associated infrastructure is proposed to be shifted with a view to make the gradient of the Incline milder/flatter (from 12° to 8°) for deploying tyre mounted trackless equipment for men/material transport. The location of the ventilation shaft has also been changed slightly accordingly. However, there are no other changes in UG layout of any seam. d. The above modification will enable the deployment of safer and advanced mode of men/material transport system with FSVs/ Men transport in the mine. |
| EC Particulars 2. The particulars of the proposal are as below: | (iii) Clearance Type : Mining EC Under 5 H a | Mine lease area is 862 ha, which is m ore than 5 ha. | Mine lease area is 862 ha, whi ch is more than 5 ha. |

Salient features of the proposed amendment:

15.8.3: A. PP sought following amendment in the EC:

| Details | As per EC d ated 02.02.2 | Amendment Sought | Remarks | View of EAC of Mo EF&CC |
|--|--|---|---|--|
| Shift of Air Return Shaf t | Falls in Khas ra No. 236 (private land) | Will be shifte d to Khasra N o. 274 (private land) due to is sues in land av ailability. Will be shifte | Justification given by P P: The slight changes propos ed will further add to safe r men/material transport a nd with a view to enhance conducive work environm ent for the workers deploy | Considering the lette r received from Mini stry of Coal, with res pect to change in inf rastructure location f or mine entries through incline and air ret urn shaft as mention |
| ine Land du e to technica l requireme nt of flatter gradient incl ine. | ra No. 104, 1 06, 109 & 11 0 (private lan d) | d to Khasra N o. 96 (private I and) due to flatten the i ncline gradien t and issues in land availabili ty. | ed in the mine. The location of the Incline mouth and associated in frastructure has been shift ed with a view to make the gradient of the Incline milder/flatter (from 12° to 8°) for deploying tyre mounted trackless equipment for men/material transport. The location of the ventilation shaft has also been changed slightly accordingly. However, there are nother changes in UG lay out of any seam. This modification will enable the deployment of safer and a dvanced mode of men/material transport system with FSVs/ Men transport in the mine. View of Ministry of Coal on the above changes: Ministry of Coal vide letter no. CCO-MPMC01(110)/1/2024-MPMC dated 06.08.2024, has mentioned that the "Mine entries are part of mine infrastructure and the same is evident from Coal Mines (Special Provisions) Act, 2015, where compensation is payable to mine entries under infrastructure. So, the changes proposed in the location of mine entries will come under the provisions of "minor changes" under para 1.3B of the OM dated 29.05.2020 of M | ed by PP in the proposal submitted shall only be allowed. For any other expansion or modification, PP shall take prior approval of Ministry of Environment, Forest and Climate Change (MoEF&CC). |

| Details | As per EC d ated 02.02.2 024 | Amendment Sought | Remarks | View of EAC of Mo EF&CC |
|---------|------------------------------------|---------------------|--|----------------------------|
| | 3 | P. I | inistry of Coal regarding Mining Plan and Mine C losure Guidelines. Also, t he related necessary cha nges in the mine layout a nd sequence of mining m ay be taken as "minor ch anges" and may be allow ed without any modificati on of Mining Plan. Accor dingly, it was confirmed t hat the shaft and incline are integral parts of the mine infrastructure and t heir relocation falls withi n the minor changes cate gory as per the guideline s." | |

Due to the shift of Air Return Shaft and inclined mouth, the land use changes during mining and post closure is furnished as below:

| | As per Approved Mine Plan | | | | | Changes envisaged in the approved mining plan | | | |
|--|-----------------------------|--------------------------------|-----------------|------------|---|---|------------------------------------|-----------------|------------|
| Туре | Land us e (propo sed) | Land us e (end o f mine li fe) | Agricult ure | Tota l | Туре | Land us e (propo sed) | Land use (end of m ine life) | Agricult ure | Tota l |
| Road & Infrastru cture Ar ea | 13.845 | 13.845 | 13.845 | 13.8 45 | Road & Inf rastructure Area | 13.845 | 13.845 | 13.845 | 13.8 45 |
| Settling Pond | 0.08 | 0.08 | 0.08 | 0.08 | Settling Po | 0.08 | 0.08 | 0.08 | 0.08 |
| Embank ment | 0.075 | 0.075 | 0.075 | 0.07 5 | Embankme nt | 0.075 | 0.075 | 0.075 | 0.07 5 |
| Green B elt | 2.0 | 2.0 | 2.0 | 2.0 | Green Belt | 5.3 | 5.3 | 5.3 | 5.3 |
| UG Entr | 2.0 | 2.0 | 2.0 | 2.0 | UG Entry | 2.0 | 2.0 | 2.0 | 2.0 |
| Undistur bed/ Mi ning Rig ht for U G | 844 | 844 | | 844 | Undisturbe d/ Mining Right for U G | 840.7 | 840.7 | | 840. 7 |

| Grand Total | 862 | 862 | 18.0 | 862 | Grand Tot al | 862 | 862 | 21.3 | 862 | |
|----------------|-----|-----|------|-----|-----------------|-----|-----|------|-----|--|
|----------------|-----|-----|------|-----|-----------------|-----|-----|------|-----|--|

15.8.4 B. PP sought the following corrigendum in the EC letter dated 02.02.2024:

| Para No | As per EC dated 02/02/2024 | Amendment Sought |
|---------|---|---|
| 2 | The particulars of the proposal are as below: | Mine lease area is 862 ha, which is more than 5 ha. (iii) Clearance Type: Fresh EC |

15.8.5: Details of court cases:

| Case No. | Court | Brief | Next date of hearing |
|-----------------------------|--|--|----------------------|
| APPEAL NO. 145 OF 2024 (WZ) | NGT (Wester n Zone Benc h, Pune) | EC on which amendment is bein g sought has been challenged bef ore Hon'ble NGT (WZ), Pune on the grounds to quash and set as ide the environmental public hearing held on 13/07/2023 by MPC B. | 16.10.2024 |

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the Committee:

15.8.6: The EAC noted the following:

- i. MoEF&CC has granted EC for Gondkhari Underground Coal Mine of M/s Adani Power Maharashtra Limited vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 for targeted capacity of 2 MTPA and peak capacity of 3 MTPA in an area of 862 Ha.
- ii. It is observed that the said project involves 87.351 Ha of forestland and the Stage I FC has been accorded on the same on 02.01.2024.
- iii. The above mentioned project is yet to be implemented.
- iv. Miscellaneous Condition no. 9.9 of EC stipulated that, "No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)."

Now, the PP has submitted the proposal to seek amendment in this particular condition to amend the same and allow the PP to "change the infrastructure location within mine lease area, mainly mine entries through inclines and ventilation shaft." Justification provided for the same by the PP is that due to issues in land availability, air return shaft and incline had to be shifted and there was also a technical requirement of a flatter gradient incline to be developed for safe working.

PP further submitted that changes in acreage are also proposed. Area for infrastructure was earlier proposed to be 18 Ha, which is now being increased by 3.31 Ha, i.e. total area proposed for acreage will be 21.31 Ha. PP also submitted that the increased area proposed will be used for greenbelt development only.

- v. The Committee observed that the said proposal was earlier deliberated in 13th EAC held on 1st-2nd July 2024, where along with the board approval letter dated 11.04.2024, PP submitted that the modifications in the mine plan proposed to be made are of minor nature (as per clause 1.3 (B) of OM dated 29.05.2020 of MOC) and the same need not to be approved from MOC. The Member Secretary confirmed the same from MOC and it was informed that it does not falls under the purview of minor changes as per the guidelines of MOC. Hence, the proposal was returned in the present form.
- vi. Now the PP has again submitted the proposal for amendment along with the letter of MOC, dated 06.08.2024, wherein it is submitted that a meeting was held at MOC on 29.07.2024 under the chairmanship of Additional Secretary and Nominated Authority, regarding this particular issue for the said project. The MOC in this letter has mentioned that the "Mine entries are part of mine infrastructure and the same is evident from Coal Mines (Special Provisions) Act, 2015, where compensation is payable to mine entries under infrastructure. So, the changes proposed in the location of mine entries will come under the provisions of "minor changes" under para 1.3B of the OM dated 29.05.2020 of Ministry of Coal regarding Mining Plan and Mine Closure Guidelines. Also, the related necessary changes in the mine layout and sequence of mining may be taken as "minor changes" and may be allowed without any modification of Mining Plan. Accordingly, it was confirmed that the shaft and incline are integral parts of the mine infrastructure and their relocation falls within the minor changes category as per the guidelines."

The Committee deliberated on the same and observed MOC has conducted a separate meeting under the chairmanship of Additional Secretary and Nominated Authority, in order to give clarification instant matter under consideration and has issued a specific report for the same stating that such changes may be taken as minor changes and may be allowed without modification of Mining Plan.

- vii. The Committee further deliberated on the impact of making such changes on the environment. In this regard, PP informed that that there is less than 50 m difference in the distance between old land and the newly proposed land and no such impact will be there on the environment for making such changes. The Committee also observed that the area increased for infrastructure (i.e., 3.31 Ha) will be used for greenbelt development.
- viii. The Committee also observed that, the proposed shift being made for air return shaft and incline land is from private land to private land only with a view to make the gradient of the Incline milder/flatter (from 12° to 8°). This modification will enable the deployment of safer and advanced mode of men/material transport system with FSVs/ Men transport in the mine.
- ix. Apart from this, another amendment sought by the PP is rectification in the EC Particulars, S. no. (iii) Clearance Type, which is mentioned as "Mining EC under 5 Ha" instead of "Fresh EC". The Committee observed that some part of the EC letter are system generated and due to technical error it is wrongly mentioned as Mining EC under 5 Ha". This should be as "Fresh EC" rather.
- x. The Committee also deliberated on the litigations pertaining to the said project and observed that the EC on which amendment is sought has been challenged at the NGT Pune and the case has been registered as *Brijkishore Hargovind Agarwal vs UOI* on 24.07.2024 as Appeal No. 145/2024. The said EC has been challenged before Hon'ble NGT (WZ), Pune on the grounds to quash and set aside the environmental public hearing held on 13/07/2023 by MPCB.PP is advised to abide by the Order of Hon'ble NGT.

Recommendations of the Committee:

15.8.7: After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. - IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 with respect to Change in infrastructure location for mine entries through incline and air return shaft as mentioned at paragraph no. 15.8.3 subject to stipulation of following additional specific condition. Other terms and conditions prescribed in EC dated 02/02/2024 shall remain unchanged.

In addition to the above, the Committee also recommended corrigendum in the EC dated 02/02/2024 as given below:

| Para No As per EC dated 02/02/2024 Amendment Sought | |
|---|--|
|---|--|

| 2 | (''') CI T |
|---|-----------------------------------|
| | (iii) Clearance Type: Fresh EC |

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Environment Conditions

3.4.6.1. Specific

| Ado | Additional Specific Conditions | | | | | | |
|-----|--|--|--|--|--|--|--|
| 1. | Change in infrastructure location for mine entries through incline and air return shaft as mentioned by PP in the proposal submitted shall only be allowed. For any other expansion or modification, PP shall take prior approval of Ministry of Environment, Forest and Climate Change (MoEF&CC). | | | | | | |
| 2. | The project proponent shall abide by all orders and judicial pronouncements, made from time to time by the Hon'ble National Green Tribunal (NGT), Western Zone, Pune in Appeal No. 145 of 2024. | | | | | | |
| 3. | Additional Green belt shall be developed by the project proponent in an area of 5.51 Ha around the periphery of Infrastructure area as committed in accordance with the CPCB guidelines and in consultation with Local Forest Department. Compliance status in this regard shall be submitted to the concerned Regional Office of the Ministry along with the six monthly compliance report. | | | | | | |
| 4. | Other terms and conditions prescribed in EC dated 02/02/2024 shall remain unchanged. | | | | | | |

4. Any Other Item(s)

N/A

5. List of Attendees

| Sr. N | Name | Designation | Email ID | Remarks |
|-------|------------------------------------|------------------|-----------------------------|---|
| 1 | Dr Sharad Singh Negi | Chairman, EAC | sha********@gmail.co m | Present |
| 2 | Dr Santoshkumar Hampa nnavar | Member (E AC) | san********@yahoo.c om | Present |
| 3 | Dr Umesh Jagannathrao Kahalekar | Member (E AC) | uka*****@rediffmail.co m | Present |
| 4 | Shri K B Biswas | Member (E AC) | bis******@gmail.com | Present |
| 5 | Dr Nazimuddin | Member (E AC) | naz******@nic.in | Absent on 18.09.2024 & Present o n 19.09.2024 |

| 6 | Shri Mahi Pal Singh | Member (E AC) | mps******@nic.in | Present |
|----|------------------------------------|------------------|------------------------------|---------|
| 7 | Sundar Ramanathan | Scientist E | r.s****@nic.in | Present |
| 8 | Sh Inder Pal Singh Matha ru IFS | Member (E AC) | mat******@gmail.com | Present |
| 9 | Sh Lalit Kapur | Member (E AC) | lka******@yahoo.com | Present |
| 10 | Sh Savalge Chandrasekha r | Member (E AC) | sav*****@gmail.com | Present |
| 11 | Prof Shyam Shanker Sing h | Member (E AC) | sin******@gmail.com | Present |
| 12 | Dr Vinod Agrawal | Member (E AC) | vin*****@yahoo.com | Present |
| 13 | Shri Harmeet Sahaney | Member (E AC) | har********@imd.go v.in | Absent |
| 14 | Prof R M Bhattacharjee | Member (E AC) | rmb********@iitism. ac.in | Present |

Ministry of Environment, Forest and Climate Change Impact Assessment Division (Coal Mining sector)

Date of zero draft MoM sent to Chairman: 26/09/2024

Approval by Chairman: 28/09/2024 Uploading on PARIVESH: 30/09/2024

SUMMARY RECORD OF THE FIFTEENTH (15TH) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD ON 18 – 19TH SEPTEMBER 2024 FOR ENVIRONMENT APPRAISAL OF COAL MINING SECTOR PROJECTS THROUGH VIRTUAL MODE.

DAY-1: 18TH SEPTEMBER, 2024 [WEDNESDAY]]

At the outset, the Chairman welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of Members who participated in the meeting is at Annexure – VI. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

Confirmation of the Minutes of the 14th Meeting of the EAC (Coal): The minutes of the 14th Meeting of the EAC (Coal) held during 5 – 7th August 2024 have been confirmed by the EAC.

Agenda No. 15.1

15.1: Proposal for amendment in Environment Clearance (EC) of Kotre Basantpur Pachmo OCP (area 1011.87 Ha having capacity 5 MTPA) by M/s Central Coalfields Limited located at Villages: Kotre, Pachmo, Hurdag, Basantpur, Pachanda, Rohawan and Bhagraiya; District: Ramgarh and Bokaro; State: Jharkhand – Amendment in EC – regarding.

[Online Proposal No. IA/JH/CMIN/493041/2024; File No. IA-J-11011/18/2019-IA-II-(I)] [Consultant: CMPDI - NABET/EIA/22-25/SA 0223 valid up to 08.04.2025]

15.1.1: The instant proposal is for amendment in Environment Clearance granted to M/s Central Coalfields Limited vide letter no. IA-J-11011/18/2019-IA-II (I), dated 18.09.2023 for Kotre Basantpur Pachmo OCP (area 1011.87 Ha having capacity 5 MTPA) located at Villages: Kotre, Pachmo, Hurdag, Basantpur, Pachanda, Rohawan and Bhagraiya; District: Ramgarh and Bokaro; State: Jharkhand

Details of all the prior ECs including the EC for which amendment is sought:

| S. | Details of | EC/ Expansion | Capacity | Area | Date of | Status of |
|-----|------------|----------------|----------|------|----------|----------------|
| No. | Letter | EC | (MTPA) | (Ha) | issuance | implementation |
| | No. | /Amendment in | | | | |
| | | EC/ Validity | | | | |
| | | extension/ | | | | |
| | | Transfer of EC | | | | |
| | | | | | | |

| 1. | IA-J- | EC | 5 | 1011.87 | 18.09.2023 | CTE and CTO |
|----|----------------|----|---|---------|------------|----------------|
| | 11011/18/2019- | | | | | has been |
| | IA-II-(I) | | | | | obtained from |
| | | | | | | the JSPCB on |
| | | | | | | 23.11.2023 and |
| | | | | | | 22.02.2024 |
| | | | | | | respectively. |
| | | | | | | The project is |
| | | | | | | yet to become |
| | | | | | | operational. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.1.2: The PP has made an online application vide proposal no. IA/JH/CMIN/493041/2024, dated 20.08.2024 for amendment in EC Specific Condition no. 4(v), 4(vi), 4(xxi) & 4(xxx) of the EC dated 18/09/2023. The details of amendment sought along with the justification is summarized as below:

| Specific/General | Details of Conditions as per | Amendment Sought | Justification |
|-----------------------------|--|--|---|
| Condition No. | EC EC | Amenament Sought | Justification |
| Specific Condition 4(v) | PP shall install dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. | | Construction of Belt Conveyor and other infrastructure may take more time to commission. |
| e Comp | December 2024). Accordingly, SPCB should grant consent to operate. | 10% by road within three years (i.e. December 2026). Accordingly, SPCB should grant consent to operate. | 381155 |
| Specific Condition 4(vi) | PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted. | PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this (Beyond December 2026). Accordingly, CTO should be granted | Construction of Belt Conveyor and other infrastructure may take some time to commission, till then transportation of Coal to Kedla washery/ any coal washery may be permitted by road transportation. |
| Specific | PP shall deploy atleast | PP shall deploy at | Exemption may be |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|--|--|--|
| Condition 4(xxi) | 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc. and deploy evehicles for workers/staff in/out of the Mine. | least 20% of overall fleet of dumpers/ trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc. (if techno-economically feasible) and deploy e-vehicles for workers/staff in/out of the Mine. | given in respect of electrical or CNG/LNG based dumpers /trucks for transportation of Coal/OB etc. In view of the non-availability of suitable technoeconomically feasible option in steeply dipping |
| Specific | PP shall construct new | Relaxation in | working seams existing at the Mine. Central Coalfield |
| Condition 4(xxx) | multispecialty (50 beds) hospital in the 10 km of the project area within 5 years for local people out of the approved budget outlay of CSR funds. The project- affected families shall be given free medical facilities. This shall be done in consultation of DM of the district | construction of new multispecialty (50 beds) hospital in the 10 km of the project area. | Limited (CCL) under CSR scheme is already running two Central Hospitals in Ranchi (250 bedded apex hospital) and at Nai Sarai, Ramgarh (150 bedded) (at 40 km from KBP Project) equipped with all modern facilities for testing diagnosis and treatment. |
| | e-Paym | ents e-Pro | In addition to this CCL is also running Regional Hospitals at Kargali (60 bedded), Dhori (50 bedded), Kathara (35 bedded), Rajrappa (20 bedded), Dakra (50 bedded) and Kedla (32 bedded) (which is 5 km from KBP OCP). Apart from this Hospitals/ |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justificatio | n |
|-----------------------------------|------------------------------------|-----------------------|--|--------------------------------|
| | | | Dispensaries running immediate me aid at each p colliery. | are for edical roject |
| | e-KYC | $C_{A_{\mathcal{F}}}$ | KBP Project hat planned construction of bedded hospitathe medical need project after people. | for f 6 - al for |
| | RI | E | Medical facility PAFs are free of | of any |
| 577 | A TO SAITA | ta ega fil | charges at any hospitals | of the and |
| | | | dispensaries | are |
| | | | being run by CO | CL. |

Observations and deliberations of the Committee:

15.1.3: The EAC noted the following:

- i. MoEF&CC has granted EC for the Kotre Basantpur Pachmo OCP of M/s Central Coalfileds Limited vide letter no. IA-J-11011/18/2019-IA-II-(I), dated 18.09.2023 for capacity of 5 MTPA in an area of 1011.87 Ha.
- ii. The Committee observed that there is total 855.17 Ha of forestland is involved and the Stage II FC has been accorded on the same vide letter dated 14.03.2024.
- iii. The Committee observed that the CTE has been obtained from the Jharkhand State Pollution Control Board (JSPCB) for 5 MTPA vide letter dated 23.11.2023 and obtained CTO from JSPCB vide letter dated 22.02.2024 which is valid up to 31.12.2024.
- iv. The project is yet to be operational and is undergoing the construction work.
- v. Specific Condition no. 4(v) of EC stipulated that "the PP shall install a dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. December 2024). Accordingly, SPCB should grant consent to operate." The PP justified that the construction work of the project could start only after the grant of EC, hence it will take some time to commission the construction of belt conveyor and other infrastructure. Therefore, PP sought amendment in the said condition seeking time extension for transportation by road till December 2026.

The Committee deliberated on the same and enquired about the length of conveyor belt to be established. PP reported it to be of 2 km length and also submitted that crusher will be installed by March 2025.

The Committee is of the opinion that the length of conveyor belt to be established is of relatively short length and can be easily targeted to be established by July 2026 instead of December 2026.

- vi. Specific Condition no. 4(vi) of EC stipulated that "PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted." The PP justified that construction of Belt Conveyor and other infrastructure may take some time to commission, till then transportation of Coal to Kedla washery/ any coal washery may be permitted by road transportation. Therefore, PP sought amendment in the said condition seeking permission for transportation by road till December 2026.
 - The Committee deliberated on the same and in pursuant to above condition is of the opinion that the establishment of the conveyor belt required can be achieved by July 2026 instead of December 2026.
- vii. The Committee also deliberated on how the transportation of coal to take place while the time conveyor belt is under construction. The PP reported that it will take place by a dedicated road and approach road to mine will be constructed inside and outside the project area of length 1.50 km and 0.26 km respectively. It will also include an already existing road to Kedla Washery of 0.70 km.
- viii. The Committee deliberated on the mitigative measures proposed for air pollution control along the coal transportation road. PP submitted that, coal will be transported through tarpaulin-covered tippers, a mobile mist type sprinkler of 28 KL capacity for dust suppression will be installed, permanent windscreens will be installed along the project's south-western and southern boundaries with a total length of 8 km, PCC topping on the concerned road is proposed to be done, fixed sprinklers along the length of Coal Transportation Route (CTR) are proposed, a vehicle wheel washing system is proposed, 3 row avenue plantation is proposed to be developed all along the transportation roads, also a CAAQMS is proposed to be installed and commissioned. PP reported that all of this will be adopted before the start of the transportation of coal along the dedicated coal transportation road of 1 km.
- ix. The Committee also deliberated about the condition of the coal transportation road and observed that the said road is yet to be constructed. PP reported that the land on which the said road will be constructed is not in possession yet and the construction will be started as soon as the land possession is acquired. Committee also deliberated on the number of trucks which will pass daily through that road on an average. The PP reported that 30 trucks on an average of the capacity of 40 tonnes each are proposed to pass through that road daily.
- x. The Committee is of the opinion that before the mining operations starts the PP must ensure that one CAAQMS shall be installed in the lease area and PP should submit the timeline of completion and budget of the same including additional measures like plantation, mobile sprinklers etc., to the EAC.

- xi. The Committee also deliberated on the plantation being done by the PP and observed that no plantation has been started yet. Committee asked the PP to submit the budget of plantation and a concurrent plantation plan to the Committee.
- xii. Specific Condition 4(xxi) of EC stipulated "PP shall deploy atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc, and deploy e-vehicles for workers/staff in/out of the Mine." The PP justified that due to non-availability of suitable techno- economically feasible option in steeply dipping working seams existing at the Mine, this particular condition may be exempted. The Committee deliberated on the same and is of the opinion that there are multiple options available in this regard. The mine is yet to be operational and available options for electrical or CNG/LNG are yet to be explored by the PP. The PP shall first explore the options available in this regard and accordingly shall fulfil the stipulated condition.
- xiii. Specific Condition 4(xxx) of EC stipulated "PP shall construct new multispecialty (50 beds) hospital in the 10 km of the project area within 5 years for local people out of the approved budget outlay of CSR funds. The project-affected families shall be given free medical facilities. This shall be done in consultation of DM of the district." The PP justified that there are already two Central Hospitals in Ranchi, running under their CSR scheme of 250 and 150 beds each at 40 km from the project area. Apart from this there are 6 other regional hospitals which are being operated by CCL and all of these are within 5 km from the project area. There are also dispensaries running at each project colliery. PP also submitted that it has also planned for construction of 6 bedded hospitals for the medical needs of PAPs and medical facilities to PAFs are free of charge at any hospital or dispensary being run by CCL.

The Committee deliberated on the same and took a serious view on the amendment sought by the PP in this regard. The Committee is of the opinion that the project is yet to be started and PP has not even envisaged the requirement of a multispecialty hospital (50 beds) within 10 km of the project area for locals and came for seeking amendment in the said condition. The Committee is of the opinion that the said condition must be complied with. In addition to this details of the operational primarry health centres and community health centres within 5 km of the mine must be provided to the Committee.

- xiv. The Committee also enquired about the court cases if any. The PP submitted that there is no litigation pending on the project.
- xv. The Committee observed in the DSS KML that there is a school within the project area and deliberated on the mitigative measures proposed by the PP for its safeguard. The PP submitted that it is not proposed to be relocated and greenbelt development is proposed around the school in order to control the air pollution around the school.
- xvi. The Committee also observed that there are 4 seasonal nallahs flowing within the project boundary which are reported to be rain-fed and are nearly dry during the non-monsoon periods. PP submitted that in order to ensure the protection of nallas in a sustainable manner and also to protect the mines from the risk of flooding during rainy season, they involved IIT Roorkee for diversion plan of the concerned nallahs and IIT (ISM) Dhanbad for Sustainability study of the said mines. A detailed project report with respect to diversion of nallah was prepared by IIT Roorkee. Committee observed that Kotre stream will be diverted during the 1st year of construction as it flows through the proposed infrastructure land and for any construction work to happen, it needs to be diverted. Another stream, that is Jhumra is observed to be diverted in 3rd year of operations and will

- be merged with the Pachmo stream. The Pachmo and Bhagaria streams are proposed to be diverted in 15th and 20th year of operations respectively.
- xvii. The Committee also observed that the said project appears to be falls under Severely Polluted Area (SPA) as per CEPI 2018 Assessment, as it is part of Ramgarh district. PP submitted that as per Jharkhand State Pollution Control Board report dated 10.11.2022, there are 2 SPAs in Ramgarh district (Ramgarh Industrial Area & Patratu Industrial Area) and none in Bokaro. Both the SPAs of Ramgarh are at the distance of 20 km and 38 km respectively. Hence, KBP OCP does not fall within SPA.
- xviii. The Committee also found mismatch in the information submitted by the PP before meeting and took it seriously and is of the view that the PP and Consultant should submit the information and the documents correctly without any error as it leads to ambiguity.

Recommendations of the Committee:

15.1.4: After deliberation, the Committee **recommended** the proposal for amendment in EC granted vide file no. IA-J-11011/18/2019-IA-II-(I) dated 18.09.2023 as detailed below. Other terms and conditions prescribed in the EC dated 18/9/2023 shall remain unchanged.

| | A) 40' | | |
|---|--|--|--|
| Reference in EC letter dated 18.09.2023 | Description as per approved EC | Amendment sought in EC | Justification/ Remarks |
| Specific Condition 4(v) | PP shall install dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. December 2024). Accordingly, SPCB should grant consent to operate. | PP shall install dedicated in-pit belt conveyor with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. December 2026). Accordingly, SPCB should grant consent to operate. | PP was asked about the length of conveyor to be established and found it to be 2 km. |
| Specific Condition 4(vi) | PP shall transport coal through conveyor belt | - | Partially agreed. With regard to the |

| Reference in EC letter dated 18.09.2023 | Description as per approved EC | Amendment sought in EC | Justification/ Remarks |
|---|--|--|---|
| KYA | to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this. Accordingly, CTO should be granted. | belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and no road transportation shall be done for this (Beyond December 2026). Accordingly, CTO should be granted. | changes in specific condition 4(v), Committee is of the opinion to amend specific condition 4(vi) as follows. "PP shall transport coal through conveyor belt to the linked Kedla Washery (as in approved Mine Plan) only or any coal washery and road transportation allowed for this till July 2026 only. Accordingly, CTO should be granted. |
| Specific Condition 4(xxi) | atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc, and deploy e-vehicles for workers/ staff in/out of the Mine. | PP shall deploy at least 20% of overall fleet of dumpers/ trucks as electrical or CNG/LNG based dumpers/trucks for transportation of Coal/OB etc. (if techno-economically feasible) and deploy evehicles for workers/staff in/out of the Mine. | Not agreed. The Committee is of the opinion that mine is yet to be operational and options for deployment of electrical or CNG/LNG based dumpers/trucks is yet to be |
| Specific Condition 4(xxx) | n PP shall construct new multispecialty (50 beds) hospital in the 10 km of the project area within 5 years for local people out of the approved budget outlay of CSR funds. The project—affected | Relaxation in construction of new multispecialty (50 beds) hospital in the 10 km of the project area. | Not agreed. The Committee is of the opinion that this particular condition is not properly envisaged by the PP and it should be given a serious thought |

| Reference in EC letter dated 18.09.2023 | Description as per approved EC | Amendment sought in EC | Justification/ Remarks |
|---|---|---------------------------|---|
| | families shall be given free medical facilities. This shall be done in consultation of DM of the district | c_{A_E} | before asking for such amendments. The project is yet to be started and health of habitants must be of utmost concern. Therefore, the said condition shall remain intact and no amendment will be granted for the same. |

Agenda No 15.2

15.2: Environment Clearance (EC) for expansion in Coal Washery from 0.96 MTPA to 5.2 MTPA in an area 10.12 Ha by M/s Sarda Energy and Minerals Limited located at Villages: Dholnara, Mudagaon; District: Raigarh; State: Chhattisgarh – Reconsideration for grant of expansion in EC based on ADS reply – reg.

[Online Proposal No. IA/CG/CMIN/473768/2024 File No. J-11015/37/2004-IA-II(M)] [Consultant: GRC India Pvt Ltd; NABET/EIA/21-24/SA 0211 valid till 11/11/2024]

15.2.1: M/s. Sarda Energy and Minerals Limited has made an online application vide proposal No-IA/CG/CMIN/473768/2024, dated 22.05.2024 along with copy of EIA/EMP Report, certified compliance report and Common Application Form (CAF) for seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006 for the project. The proposed project activity is listed at schedule no. 2(a), Coal Washeries under Category "A" of the EIA Notification, 2006 & amendment thereof and as the capacity is more than 2.5 MTPA, is being appraised at Central Level.

The project was granted ToR for expansion of production capacity from 0.96 MTPA to 5.2 MTPA in two phases (Phase I: - 0.96 to 1.8 MTPA and Phase II: - 1.8 MTPA to 5.2 MTPA) vide letter no. J-11015/37/2004-IA-II (M) dated 25.07.2023. The TOR is valid till 24.07.2027.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

15.2.2: Environmental site settings:

The project area is covered under Survey of India Toposheet No. 64N8 and is bounded by geographical co-ordinates ranging from latitude 22°09'56.43"N to 22°10'10.01"N and longitude 83°28'09.92"E to 83°10'27.46"E.

Project does not fall in the Critically Polluted Area (CPA)/ Severely Polluted Area (SPA), as per CEPI Assessment, 2018. This aspect has also been verified and confirmed through DSS.

Forest Area: PP submitted that the project does not involves any forest land. This aspect has also been verified and confirmed through DSS.

Protected Area: PP submitted that the project is not located within 10 km of any ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. and there is no violation of WLP act. This aspect has also been verified and confirmed through DSS.

7 Schedule-I species viz Elephas maximus (Elephant), Mellivora capensis (Honey badger), Melursus ursinus (Sloth bear), Panthera pardus (Panther), Striped hyaena (Hyena), Python molurus (Python), Pavo cristatus (Indian peafowl) has been sighted in the study area. Wildlife conservation plan has been prepared and approved by PCCF, Chhattisgarh.

Project Area: PP submitted that the existing plant is over 10.12 Ha of land and for the expansion project no additional land is required. Thus, total land required will remain same i.e. 10.12 Ha after expansion which has been provided to the proponent through vesting order.

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| 10.4.0. | Detans | UI UIL | I UIX al C | Tul moncu | DCIUW. |

| Date of Application | Details | Date of Accord | ToR Validity |
|---------------------|--|----------------|--------------|
| 10.07.2023 | J-11015/37/200 <mark>4-</mark> IA- II (M) | 25.07.2023 | 24.07.2027 |

15.2.4: Details of existing EC and its implementation status

The existing 0.96 MTPA Coal Washery obtained EC from SEIAA, Chhattisgarh vide letter no. 309/SEIAA-CG/EC/Coal Washery/RGH/10 dated 23.08.2010. CTE was obtained from CECB on 30.10.2010. Renewal of CTO was obtained from CECB on 10.07.2024 and same is valid till 31.05.2026. Production details of the same are as follows:

| Year | Actual Coal Production in MTPA | Approved Production Capacity in MTPA as per EC | Excess Production |
|---------|--------------------------------|--|--------------------------|
| 2023-24 | 0.95 | 0.96 | Nil |

15.2.5: Certified Compliance Report: The Status of compliance of earlier EC was obtained from Regional Office, Raipur vide letter no. 18-D-25/2010 (Env)-46, dated 09.05.2024 in the name of M/s. Sarda Energy and Minerals Limited. The Action taken report regarding the partially complied/non-complied condition was submitted to Regional officer MoEF&CC, Raipur vide letter no. SEML/ENV/CWI2024-25/5758 dated 20.05.2024. MoEF&CC (RO), Raipur evaluated the same and has issued letter vide File No. 18-D-25/2010 (Env) /121 dated 10.08.2024. The details of the

observations made by IRO in the report dated 10.08.2024 along with its re-assessment as furnished by the PP is given as below: -

| S.No. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-------|--|---|--|
| 1. | Condition XVII | | |
| | The proponent informed that details of safety measures including plant layout in the plan coal stock yard have already been submitted to CECB/SEIAA/or Regional Office of MoEF&CC. | Safety measures plan along with approved Location Plant layout is submitted. | Safety measures plan along with plant location layout has been received in this office. On perusal of the safety measures plan it has been observed that the said plan mentions the various safety measures during |
| | However, no document/evidence of such details have been received in this Sub-Office. | | construction phase, during operation phase and maintenance phase and the personnel responsible for ensuring the safety. |
| | PP shall submit Details of safety measures including approved plant layout in the plan coal stock yard. | | |
| 2. | Condition XVIII | | |
| | The proponent has not developed a green belt of 33% of total area of project area. Therefore, the proponent is instructed to submit the comprehensive plan for plantation over an area of 3.34 ha. | Comprehensive Plantation plan with year-wise breakup and earmarked funds allocated for plantation is enclosed. In this monsoon season we shall plant different plant species of 2000 nos all along the boundary. | Comprehensive plantation plan including eleven plant species to be planted during 2024-25 and the plantation map with funds earmarked (Rs 20 lakhs) has been received in the office. |
| | PP shall submit Comprehensive plan for | Symbol Control | |
| | plantation over an area of 3.34 ha | | |
| 3. | Condition XX | | |
| | The proponent informed that total expenditure incurred for implementation of EMP measure has been Rs.453.0 | All environmental measures with budget incurred as committed in EIA/EMP report has been taken up since the commencement of operation of coal washery. | 1 |

| S.No. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-------|--|--|--|
| | lakhs. However, no documents/ evidences of implementation of recommendations of EIA/EMP and socioeconomic development activities in the surrounding villages. Further the proponent informed that the code of practice for coal washery issued by Central Pollution Control Board. PP shall submit documents/ evidences of implementation of recommendations of EIA/EMP and socioeconomic development activities in the | activities carried in the | in the office. |
| 4. | The proponent has constructed rainwater harvesting over 26900 m² area in the premise. However, no documents/evidence that detailed scheme for rainwater harvesting was prepared in consultation with CGWA/SGWB and same submitted to CECB/SEIAA/ or Regional Office of MoEF&CC. The proponent informed that no ground water has been used. | Four Rainwater harvesting structures have been constructed in consultation and as per the guidelines of CGWA/CGWB. Photographs of Rainwater harvesting structures enclosed. | Rainwater harvesting structures with measurements, coefficient of runoffs and quantity of rainwater has been received in the office. |
| | documents/evidence that detailed scheme for rainwater harvesting was | | |

| S.No. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-------|---|---|--|
| | prepared in consultation with CGWA/SGWB. | | |
| 5. | The proponent informed that coal washery was installed in October, 2010 and commissioned in May 2011 adjacent to our Karwahi open cast coal mine. Due to the unavailability of ROM coal, coal washery was temporarily discontinued from 31/03/2015 to 13/2/2021 and restarted on 14/2/2022. However, no relevant documents have been received in this Sub-Office. PP shall submit all CTOs obtained from CECB and the validity of environmental clearance dated 23/08/2010 | Final approval of the project and date of commencement of land development work and commissioning of the coal washery has already been submitted to Regional Office Bhopal. A copy of the same is enclosed. Financial closure shall be intimated to SEIAA and Regional Office of Raipur. All CTE, CTO's & Valid EC copies are enclosed. | a.) EC No.309/SEIAA-CG/EC/Coal Washery/RGH 10/dated 23/8/2010 was obtained from SEIAA, Chattisgarh. b.) CTE dated 30/10/2011 was obtained from CECB. c.) (c) CTO dated 24/5/2011 was obtained from CECB and same was valid up to 23/5/2012. d.) Renewal of CTO dated 19/7/2012 was obtained from CECB and same was valid up to 30/4/2014. e.) Renewal of CTO dated 31/10/2014 was obtained from CECB and same was valid up to 30/4/2016. f.) Renewal of CTO dated 23/6/2021 was obtained from CECB and same was valid up to 22/6/2024. g.) (Renewal of CTO dated 10/7/2024 was obtained from CECB and same is valid up to 10/7/2024. h.) The proponent vide letter dated 12/12/2011 and 14/3/2022 has intimated CECB about the commencement of operation of coal washery. |
| | | | The project proponent informed |

| S.No. | Non-Compliance Details (Observation by RO) | Response of PP | Reassessment by RO |
|-------|---|----------------|---|
| | | | that financial closure shall be intimated to SEIAA and regional office of Raipur in due time. |

15.2.6: Salient features of the project:

- i. The proposed project is for Expansion of Coal Washery Plant located at Village-Bajarmuda and Dholnara, Tehsil- Tamnar, District- Raigarh, Chhattisgarh from 0.96MTPA to 5.2 MTPA in two phases (Phase I :- 0.96 to 1.8 MTPA and Phase II :- 1.8 MTPA to 5.2 MTPA).
- ii. Total coal requirement after expansion will be 5.2 MTPA out of which 1.8 MTPA will be sourced from PP's own mine adjacent to washery and remaining 3.4 MTPA coal will be taken from Jindal Steel and Power Limited. ROM Coal, Clean coal and midlings will be transported through road & rail network. PP's own railway siding is also proposed which is likely to be operational by 2026. Complete transportation of coal will be through railway once the railway siding gets operational.
- iii. The project site is at the distance of about 12.5 km towards East from SH-1. The nearest railway station is Raigarh Railway Station which is located at about 31.7 km in South direction. Nearest airport is Veer Surendra Sai Airport, Jharsuguda at 64.5 km in SE.
- **15.2.7:** Legal Issues/ Violation: PP submitted that there is no legal issue/violation wr.t i) Environment (Protection) Act, ii) Air(P&CP) Act, Water (P&CP), Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam 1980, Wildlife Protection Act, MMDR Act, Factories Act. Further, there is no court case on the project.
- 15.2.8: Water Requirement: PP submitted that the water requirement after expansion will be 851 KLD (existing is 376 KLD). The water will be sourced from adjacent mine sumps, for which NOC from CGWA vide NOC No. CGWA/NOC/MIN/ORIG/2022/17116 dated 25.11.2022, valid up to 24.11.2024 has been obtained. PP also submitted that groundwater will be used for domestic purposes, for which NOC from CGWA for withdrawal of 10 KLD of groundwater has been obtained vide NOC No. CGWA/NOC/IND/ORIG/2022/16989 dated 04.11.2022 valid up to 03.11.2025. PP further submitted that no industrial wastewater will be discharged as the plant is designed on zero effluent discharge principle and sanitary wastewater will be sent to STP. Further, there is no diversion of any river/ nallah proposed.
- **15.2.9: Power Requirement:** PP submitted that the total power requirement for the project is 3.2 MW which will be sourced from Chhattisgarh State Power Distribution Company Limited (CSPDCL). Also, 2x250 kVA DG sets will be operated for emergency use. There will be no any diversion of Hi-Tension/Transmission line due to the proposed expansion.
- **15.2.10: Baseline Data:** Environmental Baseline data has been collected during1st March 2023 to 31st May 2023 (Pre Monsoon Season):

| Period | Pre Monso | on Season: | 1 st Ma | rch 20 | 23 to 31 | st May 2023 | | | |
|----------------------------|---|---|----------------------|----------|----------|----------------|------------|-------------|----------|
| AAQ parameters | PM ₁₀ :- 57. | .1-92.7 μg/m | 3 | | | | | | |
| at 08 | $PM_{2.5} :- 30$ |).9 – 52.1 μg | $/\mathrm{m}^3$ | | | | | | |
| Locations | $SO_2 :- 6.3-1$ | | | | | | | | |
| | | $-32.6 \mu g/m^3$ | | | | | | | |
| | | CO :- $280-1430 \mu \text{g/m}^3$ | | | | | | | |
| AAQ modelling | | ncremental GLCs due to the proposed proposal: | | | | | | | |
| | | $PM_{10} := 0.91 \mu g/m^3$ at 100 m in NNE | | | | | | | |
| | | $PM_{2.5} := 0.60 \ \mu g/m^3 \ at 100 \ m \ in \ NNE$ | | | | | | | |
| | | $SO_2 = 1.87 \mu\text{g/m}^3 \text{ at } 100 \text{m in NNE}$ $NO_2 := 2.63 \mu\text{g/m}^3 \text{ at } 100 \text{m in NNE}$ | | | | | | | |
| | | | | | | | | | |
| Ground water | | $\frac{47 \mu g}{m^3}$ at 1 | 100 m | in ININ | E | € ~ | | | |
| Ground water quality at 08 | 1 | .41 ness: 256-33 | 0 ma/1 | | | | | | |
| locations | | 46-57 mg/l, | U mg/i | • | | | | | |
| Tocations | Fluoride: 0 | | | | | | | | |
| Surface water | pH: 7.36-7. | | -11 | \vee | T. | | | | |
| quality at 8 | DO: 5.6-6. | | | | | | | | |
| locations | BOD: 2.5-4 | • | | | | | | | |
| Z. | COD: 12.7 | 7-32.3 mg/l | | | | | | | |
| Noise levels | 45.8 to 73.8 | 8 dBA - day | time | | 10.37 | - | | | |
| | 34.6 to 65. | 7 dBA- N <mark>ig</mark> h | t time. | | | | | U | |
| Traffic | Traffic stud | dv has been | condu | cted at | Tamnar | Road and SI | I-1 wh | ich is adi | acent to |
| asse <mark>ssment</mark> | the project | | | | 2 807 | | | 1011 10 000 | |
| study | 1 0 | | | | | | | | |
| findings | Transporta | tion of raw i | materia | ıl, fuel | & furnis | shed product | will be | e done ma | aximum |
| | by road. | | | | | | | | |
| 0 | Existing P | CU is 142 | PCU/h | r on [| Tamnar ı | road and 30 | 9 PCU | /hr at SF | I-1 and |
| | Existing PCU is 142 PCU/hr on Tamnar road and 309 PCU/hr at SH-1 and existing level of services (LOS) is: | | | | | | | | |
| 3 | D 1 | V (Volum | e in | C (C | apacity | Existin | g V/C | Loc | |
| | Road | PCU/hr.) | C c | , | CU/hr.) | Ratio | | LOS | |
| | Tamnar Road | 142 | | 625 | | 0.23 | <i>?</i> " | В | |
| | | 309 | | 1500 | - | 0.21 | | В | |
| | 511-1 | 309 | | 1300 | _ | 0.21 | | Б | |
| | PCU load | after propo | sed Pr | oiect v | vill be | 345 PCU/hr | (142) | (Existing) | + 203 |
| | | | | | | (309 (Existin | | | |
| | | evel of Servi | | | | | 0) | | // |
| | | | | | | | | | |
| | Road | V (Volume in PCU/hr.) C(Ca | | | | C(Capacit | y Pro | posed | LOS |
| | Noau | Existing | Existing Proposed To | | Total | InPCU/hr. | _ | C Ratio | LUS |
| | Tamnar | 142 | | | 345 | 625 | 0.53 | 5 | C |
| | Road | | | | | | | | |
| | SH-1 | 309 | 203 | | 512 | 1500 | 0.34 | 4 | В |
| | Note: Capa | city as per I | RC 106 | 5:1990 | guidelin | es for capaci | y for re | oads. | |
| | Note: Capacity as per IRC 106:1990 guidelines for capacity for roads. | | | | | | | | |

| Period | Pre Monsoon Season: 1st March 2023 to 31st May 2023 | | | | | |
|-----------------|--|--|--|--|--|--|
| | Conclusion: | | | | | |
| | The modified LOS on Tamnar Road will be remained "C", i.e. Good. | | | | | |
| | The modified LOS on SH-1 will be remained "B", i.e. Very Good. | | | | | |
| | Therefore, there will be no change in LOS after completion of the project. | | | | | |
| Flora and fauna | 7 Schedule-I species viz Elephas maximus (Elephant), Mellivora capensis (Honey badger), Melursus ursinus (Sloth bear), Panthera pardus (Panther), Striped hyaena (Hyena), Python molurus (Python), Pavo cristatus (Indian peafowl) has been sighted in the study area. Wildlife conservation plan has been prepared and submitted to CCF, Bilaspur (CG) through DFO. | | | | | |

PP reported that the Laboratory involved in analysis of water, air, noise & soil quality data, etc. has been accredited by the NABL/ MoEF&CC bearing the Certificate of Accreditation No: - TC-7501 and valid till 25.04.2025.

15.2.11: Solid & Hazardous Waste: PP submitted that currently about 0.451 MTPA of Middlings is being generated during coal washing. The middlings are being stored in an earmarked place for sale to power plants for steam generation. Middlings are transported by road in covered trucks directly to the customer. After expansion of the washery, total of 2.184 MTPA of middlings will be generated during coal washing following the same procedure. Middlings are currently supplied to PP's own unit at Siltara and after expansion remaining middlings will be given to Jindal Steel and Power Limited.

15.2.12: EMP Cost: The budget earmarked by the PP for EMP is Rs. 385.80 Lakhs (Capital) and Rs. 104.5 Lakhs (Recurring).

| S. No | Activity | Capital Cost (Lakh) | Recurring expenses proposed/ annum (Lakh) |
|----------|--|------------------------|---|
| 1 | Air Pollution Control Measures | 90.8 | 28.0 |
| | DES and Bag House in crusher house | 38 | 5.0 |
| | ➤ Fixed Water sprinklers | 20 | 3.0 |
| | ➤ Mobile water sprinklers | 10 | 4.0 |
| | ➤ Enclosures to belt conveyors | 12.8 | 3.0 |
| | ➤ Asphalted internal roads | 15 | 3.0 |
| | ➤ Rain gun | 15 | 10 |
| | Water pollution control measures | 94 | 36 |
| 2 | ➤ Closed water Circuit, Thickener | 60 | 20 |
| | > Storm water drains | 10 | 2.0 |
| | ➤ Rainwater Harvesting Pond | 10 | 10 |
| | ➤ STP | 05 | 2.5 |
| | ➤ Piezometer to monitor ground water level | 9 | 1.5 |
| 3 | Green belt development | 40 | 10.0 |
| 4 | Solar Power Plant | 100 | 20.0 |

| S. No | Activity | Capital Cost (Lakh) | Recurring expenses proposed/ annum (Lakh) |
|----------|---|------------------------|---|
| 5 | Environment Management Cell | 28 | 7 |
| 6 | Environmental Monitoring | | 3.5 |
| 7 | Budget for addressing environment related issues raised during public hearing | 33 | |
| | Total | 385.8 | 104.5 |

15.2.13: Public Hearing Details: PP submitted that the Public hearing notice was published in Nayi Duniya on 28.01.2024, in Kelo Pravah on 29.01.2024 and in The Times of India on 30.01.2024. The Public Consultation was conducted on 01.03.2024, at Middle School Ground, Vill - Bajarmuda, Tehsil – Tamnar, Dist – Raigarh, Chhattisgarh under the chairmanship of Ms. Santan Devi Jagde, Additional District Magistrate. The PH was attended by 900 people and 321 nos of written representations were received from and outside the district. The major issues raised during the PH were improvement in infrastructure, concern for drinking water, employment for the locals, air pollution control measures, road safety measures & concern about health of local people. PP earmarked an amount of 160 Lakh for addressing the issues raised during PH.

Following is the action plan along with the budget allocated for each activity by the PP for the issues raised during PH:

| S. | Issue | Physical | Total | 18/2 | Ye | arwise Break | up | n e |
|----|-----------|-----------|----------|----------|----------|--------------|--------------|--------------|
| N | Raised | activity | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| 0. | during | and | | .12.4 | | | | |
| | PH | action | | 3 (5) | | | | |
| | | plan | 1 | 3 | | 18 | | |
| 1. | Improve | PP has | 65.00 | 21.30 | 21.90 | 12.50 | 4.60 | 4.70 |
| | ment of | proposed | Lakhs | Lakhs | Lakhs | Lakhs | Lakhs | Lakhs |
| | Infrastru | to adopt | > Develo | > Develo | > Develo | ➤ Mainte | > Mainte | ➤ Mainte |
| | cture in | village | pment | pment | pment | nance | nance | nance |
| | nearby | Dholnara | and | of | Village | of | of | of |
| | village | for | Mainte | Village | Roads | Villag | Villag | Villag |
| | | improve | nance | Roads | :- 12 | e | e | e |
| | | ment of | of | :- 12 | Lakhs | Roads | Roads | Roads |
| | | infrastru | Village | Lakhs | | :- | :- 2 | :- 2 |
| | | cture. | Roads | e-Pa | vments | 2 Lak | Lakhs | Lakhs |
| | | Village | :- 30 | | | hs | | |
| | | develop | Lakhs | | | | | |
| | | ment | Providi | Installi | Installi | Installi | Installi | > Installi |
| | | program | ng 200 | ng 40 | ng 40 | ng 40 | ng 40 | ng 40 |
| | | under | Street | street | street | street | street | street |
| | | consultat | Lights | lights | lights | lights | lights | lights |
| | | ion with | and | :- Rs | :- Rs | :- Rs | :- Rs | :- Rs |
| | | local | mainte | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| | | panchay | nance:- | lakhs, | lakhs, | lakhs, | lakhs, | lakhs, |
| | | at and | 5 | Mainta | Mainta | Maint | Maint | Maint |

| S. | Issue | Physical | Total | | Ye | earwise Break | up | |
|---------|------------------------|---------------------------|--|---|--|---|--|--|
| N o. | Raised during PH | activity and action | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| | during | and | lakhs Construction of 15 Nos of community toilets and mainte nance: - 15 Lakhs Community Halls and Mainta inance: - 15 | inance cost (40 lights) :- Rs 0.1 lakhs Construction of 5 commu nity toilets: - Rs 4 Lakhs, Mainta inace cost (5 toilets) :- Rs 0.25 Lakhs Construction of 1 commu nity hall:- Rs 4 Lakhs, Mainta inace | inance cost (80 lights) :- Rs 0.2 lakhs Construction of 5 commu nity toilets: - Rs 4 Lakhs, Mainta inace cost (10 toilets) :- Rs 0.50 Lakhs Construction of 1 commu nity hall:- Rs 4 Lakhs, Mainta inace | ainanc e cost (120 lights) :- Rs 0.3 lakhs Construction of 5 comm unity toilets: - Rs 4 Lakhs , Mainta inace cost (15 toilets) :- Rs 0.75 Lakhs Construction of 1 comm unity hall:- Rs 4 Lakhs , Mainta | ainanc e cost (160 lights) :- Rs 0.4 lakhs Mainta inace of 15 toilets :- Rs 0.75 Lakhs Mainta inace of 3 halls:- Rs 0.75 Lakhs | ainanc e cost (200 lights) :- Rs 0.5 lakhs Mainta inace cost (5 toilet) :- Rs 0.75 Lakhs Mainta inace of 3 halls:- Rs 0.75 Lakhs |
| | | | Lakhs | cost (1 hall) :- Rs 0.25 Lakhs | cost (2 hall) :- Rs 0.50 Lakhs | inace cost (3 hall):- Rs 0.75 Lakhs | | |

| S. | Issue | Physical | Total | | Ye | earwise Break | xup | |
|---------|----------------------------|--|--|---------|-----------------------|---------------|---------|---------|
| N o. | Raised during PH | activity and action plan | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| 2. | Employ ment for the locals | willing and employa ble youths will be identified in consultation with gram panchay at of Bajarmu da, Dholnara and Khamari ya. They will be provided training for trades namely electrician, fitters, welders, painters, and civil construction work, etc. After successful completion of training, the youths | 25 Lakhs Stipend – 17.0 Lakh (Rs. 17000/- stipend per year to 100 persons for 1 year) ITI Fee – 8.0 Lakhs (Rs. 8000/- yearly fee for 100 persons for 1 year) | 5 Lakhs | 5 Lakhs GREE yments | 5 Lakhs | 5 Lakhs | 5 Lakhs |
| | | will be offered | | | | | | |

| S. | Issue | Physical | Total | | Ye | arwise Break | up | |
|---------|------------------------|--|---|--|---|------------------------|-------------------------------------|--|
| N 0. | Raised during PH | activity and action plan | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| 3. | | action | 33 Lakhs Plantatio n of 5000 trees:- 25 Lakhs Installati on of 300 water sprinkler s :- 3 Lakhs Distribut ion of 50 no. of air purifiers | 6.48 Lakhs Plantatio n of 1000 trees:- 5 Lakhs Installati on of 60 water sprinkler s :- 0.6 Lakhs Distribut ion of 10 no. of air purifiers: | Lakhs ➤ Installati on of 60 water sprinkler s :- 0.6 Lakhs ➤ Distribut ion of 10 | _ | s:- 0.6 Lakhs Distribut ion of 10 | on of 60 water sprinkler s :- 0.6 Lakhs Distribut ion of 10 |
| | | g Water sprinklin g on road for dust dispersio n control in nearby villages in consultat ion with the authority . 50 no. of Air purifier will be | :- 5 Lakhs | - 0.8 Lakhs Maintana nce of 10 purifiers :- 0.08 lakhs | Lakhs Maintana nce of 20 purifiers | :- 0.8 Lakhs Maintan | :- 0.8 Lakhs Maintan | :- 0.8 Lakhs Maintan |

| S. | Issue | Physical | Total | Yearwise Breakup | | | | |
|---------|--------------------------------------|---|---|---|---|---|--|--|
| N o. | Raised during PH | activity and action plan distribut ed Govt School Bajarmu da and nearby health centres | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| 4. | Concern for Drinkin g water | Providin g three Water filteratio n (RO) plant in village Bazarmu da and Dholnara | 12 Lakhs | 3.6 Lakhs Installation :- 3 Lakhs, Maintenanc e :- 0.6 Lakhs | 3.6 Lakhs Installation :- 3 Lakhs, Maintenanc e :- 0.6 Lakhs | 3.6 Lakhs Installation :- 3 Lakhs, Maintenanc e :- 0.6 Lakhs | 0.6 Lakhs Maintenanc e:-0.6 Lakhs | 0.6 Lakhs Maintenanc e:-0.6 Lakhs |
| 5. | Road | Large | 5 Lakhs | 1.4 Lakhs | 1.4 Lakhs | 1.4 Lakhs | 0.4 | 0.4 |
| | Safety | size | | | | | Lakhs | Lakhs |
| | Measure s | convex mirrors will be provided at turning points of the road connecti ng SH-1 to washery and regular monitori ng of speed of | Installing large size convex mirrors at turning points and speed breakers on village roads:- 3 Lakhs | Installin g large size convex mirrors at turning points and speed breakers on village roads:- 1 Lakhs | Installin g large size convex mirrors at turning points and speed breakers on village roads:- 1 Lakhs | Installing large size convex mirrors at turning points and speed breakers on village roads:- 1 Lakhs | ocesinos ocesinos | |
| | | vehicles will be done and raining on | ProvidingTrainingonTraffic | ProvidingTrainingonTraffic | ProvidingTrainingonTraffic | Providin g Training on Traffic | Providin g Training on Traffic | Providin g Training on Traffic |

| S. | Issue | Physical | Total | | Ye | arwise Break | up | |
|---------|--------------------------------------|--|--|---|--|--|--|--|
| N o. | Raised during PH | activity and action plan | Budget | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 |
| | | Traffic awarenes s will be provided in nearby villages | Awaren ss :- Lakhs | | Awarene ss :- 0.4 Lakhs | Awaren ess :- 0.4 Lakhs | Awaren ess :- 0.4 Lakhs | Awaren ess :- 0.4 Lakhs |
| 6. | Concern about health of local people | Arrange ment of 1 Modern Ambulan ce with Life Support system with necessar y Medical Staff to Sub Health Centre, Dholeser a and Health checkup and distributi on of medicine s in Villages Bazarmu da and Dholnara | > Arrang ment of Ambulance : Rs 1 Lakhs > Conducting Health checkup:- Rs 7.5 Lakhs > Providing Medicines and other health facilities :-Rs. 2.5 Lakhs | f ment of Ambula nce:- Rs 10 Lakhs Conducting Health checku p:- Rs. 1.5 Lakhs Providing Medicines and other health | Conducting Health checkup:- Rs. 1.5 Lakhs Providing Medicines and other health facilities:-Rs. 0.5 Lakhs | Conducting Health checku p:- Rs. 1.5 Lakhs Providi ng Medici nes and other health facilitie s:-Rs. 0.5 Lakhs | Conducting Health checku p:- Rs. 1.5 Lakhs Providi ng Medici nes and other health facilitie s:-Rs. 0.5 Lakhs | Conducting Health checku p:- Rs. 1.5 Lakhs Providi ng Medici nes and other health facilitie s:-Rs. 0.5 Lakhs |
| | Tota | ıl | 160 Lakhs | 49.78 Lakhs | 40.44 Lakhs | 31.10 Lakhs | 19.26 Lakhs | 19.42 Lakhs |

15.2.14: Plantation: PP submitted that Greenbelt has been already developed in 3.34 ha (33% of total area). Total no. of 8220 trees has been already present. Further 2000 no. of saplings will be planted.

- **15.2.15: Project Cost:** The total capital cost of the project after expansion is Rs 80.12 Crores (Existing-Rs. 39.17 Cr + Expansion-Rs. 40.95 Cr) and the capital cost for environmental protection measures is proposed as Rs 3.86 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.04 Crores. The total employment generation from the project after expansion will be 239.
- **15.2.16: Affidavit and Undertaking:** PP has submitted an undertaking stating that there is no construction done at the project site w.r.t. the expansion part and there is no litigation on the project either at NGT or any other court of law. Total land in under possession of proponent. That there is no difference in the documents submitted and the presentation being made to the EAC. There are no data entry errors in the information uploaded in Parivesh. In case any deviation in data is found in any of the documents, the authorised signatory shall be held responsible and furthermore, the said proposal shall be rejected for the grant of EC.
- **15.2.17: ADS Information in chronology:** Sarda Energy and Minerals Limited has made an online application vide proposal No- IA/CG/CMIN/473768/2024, dated 22.05.2024. The proposal was initially considered in 14th meeting of EAC (Coal) held on 5th 7th August 2024 Proposal was deferred for want of additional information. The proponent submitted the ADS reply vide letter dated 30.08.2024 and uploaded on PARIVESH on 30.08.2024. Point-wise reply of ADS is given as below:

| S.No. | Queries | | | Reply |
|-------|---------|--|---|---|
| (i) | | | Conservation ne distance map w.r. nery plant and PCC | & PP submitted that wildlife conservation plan with budgetary provision of Rs. 29.48 lakhs has been prepared and same was approved by Principal Chief Conservator of Forest |
| | S | | | Approved wildlife conservation plan is also submitted. |
| | | | | Distance authentication map showing distance of nearest wildlife sanctuary and animal corridor has been submitted. |
| | | | | 7 Schedule – I species has been sighted in the study area, viz. |
| | | | | 1. Elephas maximus (Elephant), |
| | | | | 2. Mellivora Capensis (Honey Badger), |
| | | | | 3. Melursus ursinus (Sloth bear), |
| | | | | 4. Panthera pardus (Panther), |
| | | | | 5. Striped hyaena (Hyena), |
| | | | | 6. Python molurus (Python), |
| | | | | 7. Pavo Cristatus (Indian Peafowl) |

| S.No. | Queries | Reply |
|-------|--|---|
| (ii) | Action taken report of the Certified compliance report obtained from RO, Raipur vide letter no. 18-D-25/2010 (Env)-46, dated 09.05.2024 must be submitted to the concerned RO, MoEF&CC, to obtain their comments and the same shall be further submitted to the EAC for further consideration. | PP submitted that action taken report w.r.t partially/non-compliance of conditions has been submitted to IRO, Raipur on 20.05.2024. Closure letter with comments of IRO, Raipur w.r.t ATR has been obtained vide File No-18-D-25/2010(Env)/121 dated 10.08.2024. Copy of closure letter has been submitted. |
| (iii) | Revised action plan to address the issues raised during public hearing as per the Ministry's O.M. dated 30/09/2020. | As per the observation raised, the budget for addressing PH issues has been increased from INR 120 lakhs to INR 160 lakhs. Revised action plan has been submitted. |
| (iv) | The EMP budget shall be revisited and the budget pertaining to mitigation measures and plantation must be increased. The revised EMP budget shall be submitted. | As per the observation budget for EMP has been increased from INR 2.60 Cr as capital cost and INR 0.84 Cr as recurring cost to INR 3.86 Cr as capital cost to INR 1.04 Cr as recurring cost. Revised EMP budget has been submitted. |
| (v) | Action plan for shifting to e-vehicles and CNG/ LNG operated vehicles in the coal washery shall be submitted. | PP submitted that our own private railway siding is already proposed which is likely to be operational by 2026. Hence all the transportation of coal will be through railway siding. NOC for taking up private railway siding has been obtained from Chhattisgarh East Railway Limited vide letter no. CERL/Raipur/SARDA/2022-23/740 dated 23.11.2022. Copy of NOC has been submitted. Employees will be encouraged to use electric vehicles. Charging stations will be installed within washery. |
| (vi) | Undertaking from the project proponent stating that no ground water will be utilized for the coal washery during its operation phase. | PP informed that out of the total daily water requirement i.e. 851 KLD, 841 KLD water to be used for washery operation, plantation and dust suppression will be sourced from mine sumps. Only 10 KLD water will be sourced from Ground water and will be used only for drinking purpose. Permission for dewatering of 1656 KLD |

| S.No. | Queries | Reply |
|-------|--|--|
| | | water from mine sump and withdrawal of 18 KLD ground water has been obtained from CGWA vide NOC No. CGWA/NOC/MIN/ORIG/2022/17116 dated 25.11.2022. Copy of NOC and Undertaking for using water from mine sump for industrial purpose has been submitted. |
| (vii) | There is a Government school namely Bajarmuda at a distance of 0.830 km from the project boundary in northern direction. Action plan for relocation/mitigation measures to be adopted for the same shall be furnished. | PP is committed to have minimum adverse impact on Bajarmuda Government school. Following mitigation measures have been taken to minimize the impact on Sensitive areas within the study area: - > Bag filters will be provided to crushers |
| | RIV | for control of air emission. |
| | S. S | For Greenbelt will be thickened along the northern boundary of plant to minimize the pollutant emission due to project. |
| | | Village roads will be maintained and made pucca to have minimum dust emission. |
| | C. STATE CHANGE COLOR | Only PUC certified trucks will be allowed for Transportation of raw materials. Trucks will be kept covered. |
| | CPC GRE | ➤ No truck movement will be allowed during peak hours. Even during non-peak hours speed of trucks will be limited to 10 kmph near school. |
| | e-Paymen | Regular monitoring of environmental parameters will be conducted twice a year by NABL accredited laboratory. |
| | | Note: The Govt School of Village - Bajarmuda lies within the Mine lease area of Operational "Gare Pelma Sector – III" Coal Mine of Chhattisgarh State Power Generation Company Ltd (CSPGCL). |

15.2.18: Written submissions by the proponent

Written submission made by PP are summarized as below:

| S. No. | Points | Written submissions made |
|--------|--|---|
| 1. | PP should submit an undertaking regarding following points: | An Undertaking regarding the said points is submitted. |
| | > Timeline for private railway siding for transportation. | |
| | That, trucks used for transportation of raw coal, clean coal & midlings won't be older than 5 year. | |
| | That, remaining plantation will be completed within (1000 Nos) within 30 days of grant of EC. | $C_{A_{\mathcal{F}}}$ |
| | That, PP will explore the possibility of additional plantation outside the plant premises along the roads and around sensitive receptors like schools and hospitals. | EST |
| | That, PP will install three (3) nos RO water purification system of having capacity of 125 LPH each in villages Bajarmuda, Dholnara and Khamariya. | DSS |
| | That, PP will install solar plant of capacity 1 MW within plant premises. | |
| 2. | PP should submit greenbelt photographs having GPS coordinates. | PP informed that 3.34 ha land has been earmarked for greenbelt and 8220 trees are present within the project site. Additionally, 1000 nos trees will be planted within 30 days of grant of EC. |
| | Tance CK | Photographs of existing greenbelt are submitted. |
| 3. | PP should submit revised action plan for addressing the issues raised during public hearing. | PP informed that an amount of INR 1.6 cr has been allotted for addressing the issues raised during public hearing. |
| | | Action plan for addressing the issues has been submitted. |
| 4 | PP should submit the EMP budget details. | PP informed that they have allotted a budget of INR 385.8 lakhs as capital cost for Environment protection measures. Additionally, an amount of INR 104.5 lakhs will be spent per year as recurring cost for the maintenance. |

| S. No. | Points | Written submissions made |
|--------|---|---|
| | | Detailed EMP budget is submitted. |
| | | |
| 5 | PP should submit the NOC and In-principle | PP informed that NOC for setting private |
| | approval for private railway siding. | railway siding has been obtained from |
| | | Chhattisgarh East Railway Limited vide |
| | | letter no. CERL/Raipur/SARDA/2022- |
| | | 23/740 dated 23.11.2022. |
| | | Copy of NOC is submitted. |
| | KYC | Further, PP informed that in-principle |
| | 6 | approval letter has been received from |
| | | Divisional Office, South Eastern Railway |
| | | Limited vide Letter No. |
| | | P/GCT/EC/BUMA/SARDAE&M/22/11/04 |
| | P I V | dated 17.01.2023. |
| | व रिवित | Copy of in-principle approval is submitted. |

Deliberations and Observation of the Committee:

15.2.19: The Committee noted the following:

- i. The instant proposal is for brown-field project for grant of Environmental Clearance (EC) for Expansion of Coal Washery Plant from 0.96 MTPA to 5.2 MTPA in two phases (Phase I: -0.96 to 1.8 MTPA and Phase II: -1.8 MTPA to 5.2 MTPA) by Sarda Energy and Minerals Limited, located at Villages-Bajarmuda and Dholnara, Tehsil- Tamnar, District- Raigarh, State-Chhattisgarh.
- ii. The EAC also took into consideration the project site through kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH. The project area is covered under Survey of India Toposheet No. 64N8 and is bounded by geographical co-ordinates ranging from latitude 22°09'56.43"N to 22°10'10.01"N and longitude 83°28'09.92"E to 83°10'27.46"E. Also, the project does not fall under CPA/ SPA as per CEPI Assessment, 2018.
- iii. The total project area is 10.12 ha and there is no additional land proposed in the instant proposal for expansion. Further, the project does not involve any forest land and the project is not located within 10 km of any ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. and there is no violation of WLP act. However, there is presence of Schedule I species. PP submitted the approved Wildlife Conservation & Management Plan vide letter dated 01.08.2024 and the distance map w.r.t. the concerned coal washery plant by PCCF cum CWLW Chhattisgarh. The Committee observed that budget earmarked for the same as per the approved WLP is yet to be deposited.
- iv. Terms of Reference was granted on 25.07.2024. Committee deliberated on the compliance of the conditions of the existing EC. The PP submitted that the Certified Compliance Report of the existing EC was obtained from Regional Office, Raipur vide letter no. 18-D-25/2010 (Env)-46, dated 09.05.2024 in the name of M/s. Sarda Energy and Minerals Limited. It is

observed that the compliances pertaining to the conditions of safety measures to be taken for storage of coal stock and plant layout, development of greenbelt and approved scheme of rainwater harvesting from the CGWA/SGWB have been either partially complied or not complied. PP submitted the closure report dated 10.08.2024 received from the IRO Raipur w.r.t the ATR to CCR dated 20.05.2024. The Committee deliberated on the closure report received from IRO and found it to be satisfactory.

- v. The Public hearing was conducted on 01.03.2024 under the chairmanship of Ms Santan Devi Jagde, Additional District Magistrate. The advertisement for PH was publish in Nayi Duniya on 28.01.2024, in Kelo Pravah on 29.01.2024 and in The Times of India on 30.01.2024. The Public Hearing was attended by 900 no of persons and total 321 no of written comments were also received. The main issues raised during the PH involves Improvement of Infrastructure, Concern for Drinking Water, Employment for the locals, Air Pollution Control Measures, Road Safety Measures, Concern about health of local people. The budget earmarked to address the issues raised during PH is reported to be Rs. 1.60 Cr changed from Rs. 1.20 Cr as per the suggestions given by EAC in the previously held meeting. The changes made in the budget are observed to be incremental in the existing activities only.
- vi. The total capital cost of the project after expansion is Rs 80.12 Crores (Existing-Rs. 39.17 Cr + Expansion- Rs. 40.95 Cr) and the capital cost for environmental protection measures is proposed as Rs 385.8 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 104.5 Lakhs. The EMP cost for both capital and recurring expenses has been increased as per the suggestions given by EAC in the previously held meeting.
- vii. The Committee observed that the total employment generation from the project after expansion will be 239.
- viii. The Committee deliberated on the plantation activities in the project area. The PP submitted that Greenbelt has been already developed in 3.34 ha (33% of total area). Total no. of 8220 trees are already present. Geo-tagged photos of the same has been submitted by the PP. Further, PP reported that 1000 nos of plants have been planted in the current monsoon session and the remaining 1000 no. of saplings will be planted. The PP has submitted a comprehensive plantation plan including eleven species to be planted during 2024-25 and the plantation map with funds earmarked (Rs. 20 Lakhs as a capital cost and Rs. 5 Lakhs per annum as recurring cost). PP also submitted an undertaking stating that the remaining plantation (1000 nos) will be completed within 30 days of the grant of EC.
 - ix. Total coal requirement after expansion will be 5.2 MTPA out of which 1.8 MTPA will be sourced from PP's own mine adjacent to washery and remaining 3.4 MTPA coal will be taken from Jindal Steel and Power Limited. The transportation of the same shall be done through road and rail networks.
 - x. There is no court case pending on the project.
- xi. The Committee deliberated on the water requirement of the project and observed that total requirement of water during the construction stage will be 10 KLD, necessary permissions for the same has been obtained by the PP and at the operational stage will be 851 KLD. At the same time, the PP has constructed rainwater harvesting over 26900 m² area in the premises. However, no documents/evidence that detailed scheme for rainwater harvesting was prepared in consultation with CGWA/SGWB and same submitted to Regional Office of MoEF&CC as per the CCR obtained from RO, Raipur. The Committee observed in the IRO report that the PP has submitted the details of rain water harvesting to the RO office. At the same time

Committee is of the opinion that the PP shall increase the capacity of the rainwater harvesting and storage tank.

- xii. The Committee deliberated on the generation of Solid and Hazardous waste and observed that solid waste being generated from the washery is of Midlings, which will be sold to power plants for steam generation. Other solid waste being generated is that of plastic, used computers, CPU, used batteries, etc., which shall be sold to the recyclers. Apart from this, the hazardous waste being generated is used oil which will be sold to authorized recycler/vendors.
- xiii. The Committee deliberated on the mode of transportation and observed that on suggestions given by the Committee in the previous meeting the PP has planned to install e-vehicle charging stations within the washery and the employees of the washery will be encouraged to use e-vehicles. Also, the PP reported that they have proposed their own private railway siding, which is likely to be operational by 2026. PP submitted that NOC vide letter no. CERL/Raipur/SARDA/2022-23/740, dated 23.11.2022 has been obtained from Chhattisgarh East Railway Limited in this regard. The Committee also suggested to not to use vehicles older than 5 years to mitigate air pollution.
- xiv. The Committee observed that there is a government school namely Bajarmuda at a distance of 0.83 Km from the project boundary in the northern direction and sought for the action plan for relocation or mitigation measures proposed to be adopted for protection of the same. PP submitted that the school is not proposed to be relocated, but rather mitigation measures have been taken to minimize the impact on the school by providing bag filters to crushers for control of air emission, greenbelt will be thickened along the northern boundary of the plant, possibilities of additional plantation around the school in consultation with the management will be explored, village road will be maintained and made pucca to have minimum dust emission, only PUC verified covered trucks will be allowed for transportation of raw material, truck movement will be restricted during peak hours and even during non-peak hours the speed of the trucks will be limited to 10 kmph near the school. Apart from this, PP reported that a monitoring committee will be constituted to take care of all the compliances and all the precautionary measures. Also, regular monitoring of environmental parameters will be conducted twice a year by NABL accredited laboratory.
- xv. Committee also deliberated on one of the most sensitive issue raised during Public Hearing, i.e., concern for drinking water. The Committee observed that only 2 nos. of water filtration (RO) plants are proposed and found it to be of inadequate capacity. The Committee suggested the PP to increase the nos of ROs to meet the needs of the affected villagers. The PP submitted an undertaking stating that it will install 3 nos of RO water purification system of 125 LPH each in villages Bajarmuda, Dholnara and Khamariya.
- xvi. The Committee also deliberated on another issue raised during the Public Hearing, i.e., road safety measures. The PP submitted that large convex mirrors will be provided at the turning points of the road connecting SH-1 to washery and regular monitoring of the speed of vehicles will be done and training of traffic awareness will be provided in the nearby villages. The Committee is of the opinion that the PP should have a traffic circulation plan designed by some reputed institute. The Committee also asked the PP to properly plan the trucks' parking so that it is not problematic for the nearby villagers.
- xvii. The Committee further deliberated on the installation of solar power plant as proposed in the EMP budget submitted by the PP. The PP submitted an undertaking stating that it will install a solar power plant of capacity 1 MW within the plant premises.

- xviii. The EAC noted that the Project Proponent has given an undertaking stating that there is no construction done at the project site w.r.t. the expansion part and there is no litigation on the project either at NGT or any other court of law. Total land in under possession of proponent. That there is no difference in the documents submitted and the presentation being made to the EAC. There are no data entry errors in the information uploaded in Parivesh. In case any deviation in data is found in any of the documents, the authorised signatory shall be held responsible and furthermore, the said proposal shall be rejected for the grant of EC.
- xix. The Committee deliberated on the ADS reply submitted by the PP and observed the following:
 - PP has submitted the wildlife conservation plan along with its approval by PCCF Chhattisgarh. PP has also submitted the Distance authentication map showing the distance of nearest wildlife sanctuary and animal corridor. Total 7 Schedule-I species has been found in the study area.
 - PP has submitted the Closure letter no. File No-18-D-25/2010(Env)/121 dated 10.08.2024 with comments of IRO, Raipur on the ATR submitted by PP w.r.t. partially/non-compliance of conditions of IRO report dated 09.05.2024.
 - PP has submitted the revised action plan along with revised budget of Rs. 160 lakhs as against earlier proposed Rs. 120 Lakhs for PH action plan as stated above.
 - PP has also submitted revised EMP Budget of Rs. 385.8 Lakhs as capital cost and 104.5 Lakhs as annual Recurring cost.
 - As regards to Action plan for shifting to e-vehicles and CNG/ LNG operated vehicles, PP submitted that their own private railway siding is already proposed which is likely to be operational by 2026. Hence, all the transportation of coal will be through railway siding. NOC for taking up private railway siding has been obtained from Chhattisgarh East Railway Limited vide letter no. CERL/Raipur/SARDA/2022-23/740 dated 23.11.2022. Copy of NOC has been submitted. PP further submitted that Employees will be encouraged to use electric vehicles. Charging stations will be installed within washery.
 - PP has submitted the undertaking regarding using water from mine sump for industrial purpose and use of ground water for drinking purpose only.
 - Regarding the mitigation measures to be adopted for the presence of the school, PP submitted that they are committed to have minimum adverse impact on Bajarmuda Government school. Following mitigation measures have been taken to minimize the impact on Sensitive areas within the study area:
 - i. Bag filters will be provided to crushers for control of air emission.
 - ii. Greenbelt will be thickened along the northern boundary of plant to minimize the pollutant emission due to project.
 - iii. Village roads will be maintained and made pucca to have minimum dust emission.
 - iv. Only PUC certified trucks will be allowed for Transportation of raw materials. Trucks will be kept covered.

- v. No truck movement will be allowed during peak hours. Even during non-peak hours speed of trucks will be limited to 10 kmph near school.
- vi. Regular monitoring of environmental parameters will be conducted twice a year by NABL accredited laboratory.
- xx. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.
- xxi. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project due to the proposed project within NAAQS.
- xxii. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner.
- xxiii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

Recommendations of the Committee:

15.2.20: In view of the foregoing and after detailed deliberations, the committee *recommended* the instant proposal for grant of Ebvironmental Clearance under the provisions of EIA Notification, 2006, subject to uploading of written submission on PARIVESH portal and subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

- i. PP shall deploy at least 20% of overall fleet of trucks as electrical or CNG/LNG based trucks for transportation of raw coal, washed coal, midlings. Also, the vehicles to be used for washery operations and transportation shall not be older than 5 years.
- ii. A traffic circulation plan must be designed by some reputed institute and the same shall be implemented.
- iii. Project proponent shall deploy trucks having Gross Capacity of 55 ton and carrying capacity of 40 tons for road transportation of raw coal, clean coal and middling, rejects to reduce the fleet size. Transportation of run-of-mine (ROM) Coal, washed coal and rejects coal by road is permitted till 31/12/2026. The private railway siding of PP must be established by 31.12.2026 and the transportation of coal and rejects should take place through railways only, thereafter.
- iv. Project proponent shall install a solar power plant of 1 MW capacity within plant premises by 31.03.2025.
- v. Water spraying shall be done on regular basis inside and around the project area (within 2 km of the plant site) on a regular interval and a log book should be maintained for the same. The fog cannon must be installed at periphery of the Coal washery in order to suppress the dust.
- vi. All the roads proposed to be constructed inside and around the periphery of the plant shall be concrete road only. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as

- schools, hospitals etc.
- vii. Greenbelt has been already developed in 3.34 ha (33% of total area). Total no. of 8220 trees has been already planted. Further 2000 no. of saplings shall be planted during 2024-25. Greenbelt shall be thickened along the northern boundary of plant to minimize the pollutant emission due to project on Bajarmuda school as committed. Greenbelt of 30-50 m width, consisting of at least 3 tiers around plant boundary shall be maintained. In addition to this, tree plantation (5000 trees) will be done in nearby villages Bajarmuda, Dholnara and Khamariya and the near by sensitive receptors school and hospitals during 2024-25.
- viii. The Plant will operate on closed water circuit with a concept of 'Zero Liquid Discharge' (ZLD). 100% water will be recycled and no treated & untreated wastewater shall be discharged outside the boundaries of project area.
- ix. Project proponent shall implement the protective measures as proposed in environment management plan (EMP) in a time-bound manner. The budget earmarked for the same is Rs 385.8 Lakhs (Capital) and Rs 104.5 Lakhs (recurring)/ annum and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office of the Ministry for the activities carried out during the previous year.
- x. Wildlife conservation plan as approved by the competent authority shall be implemented. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of one month from the date of grant of EC and the budget approved by the concerned authority shall be deposited in government account.
- xi. Project proponent shall install a continuous ambient air quality monitoring station (AQMS) at suitable locations preferably the village side with the consultation of SPCB before commissioning of Plant operations. The real time data so generated shall be uploaded on company's website and it will be linked with CPCB &SPCB web portal. In addition, data should also be displayed digitally at entry and exit gate of Plant for public display.
- xii. The workers shall be provided all the essential facilities/Personal Protective Equipments (PPE) during operation and maintenance at workplace.
- xiii. Project proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly. Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly.
- xiv. Project proponent shall use of Gas engine/ Cleaner fuel engine for use of machines or as power back up to reduce the pollution load on environment. Project proponent shall implement additional measures to control Air pollution.
- xv. Project proponent shall implement the activities proposed to address the issues raised during the public hearing in a time bound manner as committed in EIA/EMP report inter-alia installation of 3 nos of water purification (RO) plants must be installed of 125 LPH capacity each in villages Bajarmuda, Dholnara and Khamariya. The budget earmarked to address the concerns raided during public hearing is Rs. 160 Lakhs (Capital) that should be kept in a separate accounts and audited annually. The implementation status/ action taken report along with the amount spent with documentary proof shall be submitted to the concerned Regional Office of the Ministry for the activities carried out during the previous year.

- xvi. Project proponent shall monitor the heavy metal in the water samples at least twice/year, and install the piezometers for regular monitoring of groundwater level. Report shall be submitted along with six-monthly compliance reports to the concerned Regional Office of the Ministry.
- xvii. Project proponent to undertake the recruitment of a full-fledged qualified manpower with Environmental Engineer/Env. Science degree background in Environment Management Cell etc., at coal washery plant for compliance of EC conditions.
- xviii. Raw coal, washed coal and rejects shall be stored in covered storage facility. Fixed-type high-pressure sprinkler shall be installed in this storage yards.
- xix. NoC from Central Ground Water Authority (CGWA)/ concerned local authority, as the case may be, shall be obtained before drawing the ground water for the project activities. State pollution control board/pollution control committees shall not issue the consent to operate (CTO) under Air (prevention and control of Pollution) Act and Water (Air (prevention and control of Pollution) Act till the project proponent shall obtain such permission.
- xx. Project proponent shall construct a 20 ft height wind barrier with galvanized/metal sheet all around the boundary of the washery and install fixed-type water sprinkler all along the boundary wall.
- xxi. Project proponent shall ensure that suitable parking area shall be provided for the parking of the trucks and necessary arrangements (drinking water facility/ rest room/ toilets etc.) shall be provided for the drivers & helpers.
- xxii. Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

B. General conditions

I. Statutory compliance:

- (i) 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.
- (ii) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (iii) Solid waste/hazardous waste generated in the washery needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.
- (iv) Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

II. Air quality monitoring and preservation:

i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namelyparticulates, SO2and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors 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.

- ii. 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, PM_{2.5}, 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.
- iii. Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board
- iv. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.
- v. Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.
- vi. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- vii. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- viii. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

III. 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 25.9.2000 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-lA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.
- iii. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.
- iv. The project proponent shall not alter major water channels around the site. Appropriate

embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the riverfront side stabilized with plantation so as to withstand the peak water pressure preventing any chance of inundation.

- v. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- vi. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.
- vii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEF&CC and implemented.
- viii. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- ix. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m3/tonne of raw coal.
- x. 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. 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.
- 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 riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. The noise level survey shall be carried out as per the prescribed guide lines to assess noise exposure of the workers at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.
- ii. 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.

V. Coal beneficiation

- i. Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.
- ii. Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

VI. Green Belt

i. 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.

VII. Public hearing and Human health issues

- 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. 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.
- ii. 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.
- iii. 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.
- iv. The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-IA.I1 (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'.

VIII. 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 web site permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents tithe 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; PM₁₀, SO₂, 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.
- 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 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.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. 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.
- x. No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC) with such conditions mentioned therein. No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made.
- xi. 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.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. 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.
- 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 Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed

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by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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

Agenda No. 15.3

15.3: Pakri Barwadih Coal Mining Project (area 3319.42 Ha having capacity 18 MTPA) by M/s NTPC Mining Limited located at Villages: Barkagaon, Itij, Chiruadih, Urub, Chepa, Kalan, Nagri, Jugra, Sinduari, Churchu, Carahara, Sonbarsa, Pakri – Barwadih; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/475123/2024; File No. J-11015/692/2007-IA-II(M)] [Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.3.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/692/2007-IA-II(M) dated 19.05.2009, later transferred to M/s NTPC Mining Limited vide letter no. J-11015/692/2007-IA-II(M) dated 02.05.2024 for Pakri Barwadih Coal Mining Project (area 3319.42 Ha having capacity 18 MTPA) located at Villages: Barkagaon, Itij, Chiruadih, Urub, Chepa, Kalan, Nagri, Jugra, Sinduari, Churchu, Carahara, Sonbarsa, Pakri – Barwadih; District: Hazaribagh; State: Jharkhand.

Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| S. | Details of | Details of | Capacity | Area | Date of | Status of |
|-----|-----------------|------------------------|----------|---------|-------------------------|------------------|
| No. | Letter No. | EC/Expansion EC/ | (MTPA) | (Ha) | issu <mark>an</mark> ce | implementation |
| | / S / | Amendment in EC/ | if She P | | | |
| | 1 3 | Validity extension/ | | 3 | | 0 |
| | (a) | Transfer of EC | CREE | | - 5 | |
| 1 | J- | Fresh EC | 15 | 3319.42 | 19.05.2009 | Production of 15 |
| | 11015/692/2007- | 9 | | | \sim | MTPA achieved |
| | IA.II(M) | | | | X | during the year |
| | | e-Daw | | | | 2023-2024 |
| 2 | -do- | Amendment in EC | 15 | 3319.42 | 29.06.2016 | Implemented |
| | | | | | | |
| | | [Road transportation | | | | |
| | | granted till | | | | |
| | | 28.06.2018] | | | | |
| 3 | -do- | Amendment in EC | 15 | 3319.42 | 07.12.2017 | Being |
| | | [Specific Condition | | | | implemented |
| | | nos (iii), (vi) & (ix) | | | | |
| | | And General | | | | |

| S. | Details of | Details of | Capacity | Area | Date of | Status of |
|-----|-------------------|-----------------------------|----------|---------|--------------|---------------------------|
| No. | Letter No. | EC/Expansion EC/ | (MTPA) | (Ha) | issuance | implementation |
| | | Amendment in EC/ | | | | _ |
| | | Validity extension/ | | | | |
| | | Transfer of EC | | | | |
| | | Condition nos (ix) & | | | | |
| | | (xiii)] | | | | |
| 4 | -do- | Amendment in EC | 15 | 3319.42 | 14.08.2018 | Implemented |
| | | [Road transportation | | На | | |
| | | granted till | | | | |
| | | 28.06.2020] | | Ca | | |
| 5 | -do- | Amendment in EC | 15 | 3319.42 | 10.11.2020 | Road transport |
| | | [Road transport | MTPA | Ha | | granted till |
| | | granted till | \/ x | | | 28.06.2022 and |
| | | 28.06.2022 and auto | Y | | | auto extended to |
| | | extended to | 2-5 | J' | | 28.06.2023 in |
| | | 28.06.2023 in line | GILL BY |) < | | line with Covid |
| | | with Covid notification of | | A 1 | | notification of MOEF&CC - |
| | | notification of MOEF&CC | | | | Implemented |
| 6 | -do- | Amendment in EC | 15 | 3319.42 | 16.08.2023 | Implemented |
| | -40- | [Road transport | MTPA | Ha | 10.06.2023 | implemented |
| | | granted till | 1411171 | 114 | | |
| | | 31.10.2023] | | // 3 | | |
| 7 | -do- | Amendment in EC | 15 | 3319.42 | 09.11.2023 | Implemented |
| | | [Road transport | MTPA | На | | 1 |
| | | granted till | if She | | | |
| | | 31.01.2024] | -5 | N | - √ § | |
| 8 | -do- | Amendment in EC | 15 | 3319.42 | 15.01.2024 | Implemented |
| | | [Road transport | MTPA | Ha | , C | |
| | | granted till | | \\ | 860 | |
| | | 31.07.2024] | | 1/ 6 | | |
| 9 | -do- | PRC Enhancement | 18 | 3319.42 | 06.03.2024 | Being |
| | | (1st phase 20%) as | MTPA | Ha | | implemented |
| | | per MoEF&CC | | | | |
| | | guidelines dated 11/04/2022 | | | | |
| 10 | -do- | Transfer of EC | 18 | 3319.42 | 02.05.2024 | Transfer from |
| - | | Transfer from | MTPA | Ha | | NTPC Ltd to |
| | | NTPC Ltd to NTPC | | | | NTPC Mining |
| | | Mining Ltd] | | | | Ltd |
| 11 | -do- | Amendment in EC | 18 | 3319.42 | 16.07.2024 | Being |

| S. | Details of | Details of | | Capacity | Area | Date of | Status of |
|-----|------------|---------------------|-------|----------|------|----------|----------------|
| No. | Letter No. | EC/Expansion EC/ | | (MTPA) | (Ha) | issuance | implementation |
| | | Amendment in EC/ | | | | | |
| | | Validity extension/ | | | | | |
| | | Transfer of EC | | | | | |
| | | [Road tran | sport | MTPA | На | | Implemented |
| | | granted | till | | | | |
| | | 31.10.2024] | | | | | |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.3.2: The PP has made an online application vide proposal no. IA/JH/CMIN/475123/2024 dated 28.08.2024 for amendment in EC Specific Condition no. 2A(ix) accorded vide letter no. J-11015/692/2007-IA-II(M) dated 19.05.2009, seeking further amendment for extension of timeline regarding transportation of coal by road using State Highway/ Service Road till 31.12.2024 and after that 13 MTPA by belt conveyor and 5 MTPA by State Highway/ Service Road till 31.03.2026.

PP submitted the following details for the amendment sought along with the justification:

| Specific/ Details of | | Amendment | Justification |
|-----------------------|-------------------|---------------------|--|
| General Conditions as | | Sought | S |
| Condition | per EC | | |
| No. | | | |
| Specific | The PP needs to | The PP is | Silo Rapid Loading System is still under |
| Condition | complete the | permitted to use | construction and was getting delayed due to |
| No 2A | construction of | Service Road/ | various land acquisition and local law and order |
| (ix) | closed belt | State Highways | issues. The delay in construction was mainly |
| | conveyor | for transportation | due to the unavailability of land. It is pertinent |
| | system of a | of 18 MTPA of | to submit that due to the continuous agitations |
| | length of 13 km | coal to Banadag | of locals for fulfilment of demands beyond the |
| | to Banadag | railway siding till | acquisition policy etc., NTPC had to repeatedly |
| | railway station. | 31.12.2024 and | write to the Deputy Commissioner, Hazaribagh, |
| | The pp is | after that 13 | Jharkhand requesting for deployment of police |
| | permitted till | MTPA by Belt | personnel for taking possession of the notified |
| | 31.10.2024 to | conveyor and 5 | land (for which the payment was already |
| | use Service | MTPA by Service | disbursed/ compensation was already |
| | road/State | Road/State | deposited). Due to such protest and agitations, |
| | Highways for | Highways till | the required extent of land could be taken in |
| | transportation of | 31.03.2026 | possession only on 28.04.2023. After |
| | coal to Banadag | adopting all | 28.04.2023, construction of Silo Rapid Loading |
| | railway siding. | mitigative | System is in full swing and complete conveyor |
| | | measure to | belt system is expected to be completed by |
| | | control dust | 31.12.2024. |
| | | pollution. | |

| Specific/ General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification | | |
|--|---------------------------------------|---------------------|--|--|--|
| 110. | | | Hon'ble Supreme Court has extended the timeline for completion of belt conveyor system till 31.12.2024 vide its order dated 29.01.2024 in the matter of Misc. Appeal No. 1824 of 2023 in Civil Appeal No. 6249 of 2021 (NTPC Ltd v. Tripurari Singh and Others). | | |
| | · | RIY | Presently, Pakri Barwadih Coal Mining Project (PBCMP) dispatches coal from mine at Pakri Barwadih to railway siding at Banadag in following modes/ways: | | |
| 3 | Q. | 750 A. 260 | Part I: From mine pit to crusher installed at mine pithead by mine trucks for the entire quantity proposed throughout the mine life. | | |
| | | | Part II: (a) From Crusher at mine pithead to Stacker/ Reclaimer area by 8 Km closed belt conveyor and therefrom by 13 Km closed belt conveyor up to TP-10 located at 500m from Banadag Railway Siding. From TP- | | |
| | Compliant | CPC GI | 10 to Banadag Railway Siding by road. (b) From crusher at mine pithead to Banadag railway siding by road (30 Km). (c) From Stacker/ Reclaimer area to Banadag Railway Siding by road (23 Km). | | |
| | | e-Paym | For connecting TP 10 to siding by conveyor, Silo Rapid Loading System is still under construction and likely to be complete by 31.12.2024. The completion status of the RLS work, as on 31.08.2024, is as follows: | | |
| | | | Sl. Description Completion No. % i Civil works 99.39 | | |
| | | | ii Structural Supply 100 iii Electrical and 100 Mechanical Supply | | |
| | | | iv Structural Erection 87 | | |

| Specific/ General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification | |
|--|---------------------------------------|---|--|--|
| | per EC | Paymorects of Control | 16.07.2024, EC was granted to transport coal to 18 MMT per annum till 31.10.2024. Due to design capability of present CHP & RI System, which is of 15 MTPA, balance MTPA shall be required to be transport | C), & vas PA. File tted up LS 3 tted the ing tire om eak will of |
| | | | the comprehensive coal conveying system operates at 90% of its rated capacity after the stabilisation period, there may be additional requirement of 2 MTPA required to transported through road. Therefore, af 31.12.2024, approx. 5 MTPA out of 18 MTF shall be required to be transported through road. | the nal be fter PA |

15.3.3: Certified Compliance Report and Action Taken thereof: The PP submitted that CCR from Regional office (RO), Ranchi was received on 19.06.2024 vide letter no. 103-425/376 and PP submitted ATR on the same on 26.08.2024.

With respect to the Condition for which amendment is sought, RO has given its observations and has mentioned that, "during inspection on 30.05.2024 it was observed that coal transportation is still being done by road from Pakri Barwadih coal mine project to Banadag railway siding. It is observed that rapid loading system of the conveyor system is under construction near Banadag railway siding. PP informed that now full efforts are being made to complete the same before 31.12.2024."

15.3.4: Detail of the court cases:

| Case No. | Court | Brief | Next date of hearing | Decision of court and its compliance |
|---------------------|-----------------|---|---|---|
| WP (C) 5732/2016 | HC of Jharkhand | Writ Petition filed by Bhartiya Suraj Dal against State of Jharkhand and others regarding pollution and diversion of forest land without obtaining the consent of Gram Sabhas under the FRA Act 2006. | Next hearing scheduled on 20.09.2024. | Last hearing conducted on 07.08.2024. Cases to be further heard on next date of hearing. |
| WP (C) 4036/2021 | HC of Jharkhand | Writ Petition has been filed by NTPC against the State of Jharkhand and others against demand of transit fee on 100 % coal production under Jharkhand Forest Produce Transit (Regulation of Transport) Rules 2020 issued by State of Jharkhand. | Listed for hearing in first week of February 2024. No date showing for now. Next date is not given. | High Court of Jharkhand has ordered to pay Transit Fee on 40% Production till further order. Stay granted via order dated 10/01/22 and clubbed with other such cases. |
| WP (C) 1759/2023 | HC of Jharkhand | Writ Petition filed by NTPC against the State of Jharkhand and | Next hearing date is not given | Hon'ble court vide order dated 06.09.2024 directed NTPC not to be |

| Case No. | Court | Brief | Next date of hearing | Decision of court and its compliance |
|---------------------|-----------------|---|---------------------------------|--|
| KY4 | Q. K. Y. Wanner | others to stay the operation, implementation and execution of the letter No. 43, dated 03.01.2023 of Divisional Forest Officer (West), Hazaribagh by which the State of Jharkhand has demanded the payment of Transit Fee for the second time on the same load by stating that NTPC is liable to generate the challan for the second time when there is a change of mode of transportation. | | charged twice for the same forest produce on the change of mode of transportation for transportation of any forest produce as transit fee. Hon'ble Court has stayed the order till next date of hearing held on 21/02/24. |
| WP (C) 3256/2023 | HC of Jharkhand | Writ Petition filed by NTPC against the State of Jharkhand and others regarding quashing the letter No. 3426, dated 23.06.2023 of Divisional Forest Officer (West), Hazaribagh by which Forest Deptt. has denied Coal Transportation by Road. | Next hearing date is not given. | The Hon'ble High Court granted stay on the letter vide order dated 30.06.2024. |

| Case No. | Court | Brief | Next date of hearing | Decision of court and its compliance |
|--------------------------------------|-----------------|---|--|--|
| WP (C) 3614/2023 | HC of Jharkhand | PIL filled by Shri Mantu Soni against State of Jharkhand and Others regarding FC granted to Pakri Barwadih Coal Mining Project on forged document (Consent letter of Van Prabandhan Samittee). | Next hearing is scheduled on 20.09.2024 | CA filled by NTPC on 18.06.2024. Rejoinder filled by applicant on 27.06.2024. Supplementary Counter Affidavit filed by NTPC on 07.08.2024. Reply of affidavit filed by applicant on 20.08.2024. |
| OA no 63/2023/EZ (158/2023/PB) | NGT, Kolkata | Filed by Shri Anup Kumar against State of Jharkhand and Others regarding illegal mining in Pakri Barwadih Coal Mining Project. Vide order dated 11.08.2023, NTPC and its MDO(TSMPL) has been made party by the Hon'ble court. | Next hearing is scheduled on 12.11.2024. | Due to similar nature hearings are being held with Appeal No 20/2023 Last hearing conducted on 22.08.2024. Case o be further heard on 12.11.2024. |

| Case No. | Court | Brief | Next date of | Decision of court |
|------------------------|-----------------|--|--------------------------------------|--|
| Appeal No 20/2023 | NGT, Kolkata | Appeal filed by NTPC against State of Jharkhand & Others to stay on DFO's demand letter for payment of Penal NPV with interest in line with MOEF&CC amendment letter dated 25.05.2023 for amendment of condition no-8 of FC. | hearing is scheduled on 12.11.2024. | and its compliance Ist hearing done on 01.08.2023. Hon'ble NGT stayed on DFO's Demand letter. Last hearing conducted on 22.08.2024, stay continued till further order. |
| W.P.(PIL) 4358/2024 | HC of Jharkhand | PIL filed by Shri Ravikant Singh Vs Union of India and others regarding Mining beyond lease and regarding FC granted to Pakri Barwadih Coal Mining Project on forged document (Consent letter of Van Prabandhan Samittee). | Next hearing scheduled on 20.09.2024 | First Hearing held on 28.08.2024. CA filled by NTPC on 02.09.2024. |

15.3.4 Traffic assessment study

Traffic study report had been carried for assessment of impacts due to transportation of coal by road from Pakri Barwadih coal mining project to Banadag railway siding. The traffic study has conducted traffic and road surveys for assessment of carrying capacity on route, monitoring of air quality and noise levels along the route, air quality modelling for impact assessment of incremental ground level concentration of air pollutants, data collection regarding flora and opinion survey along the road and identification of villages, forests within 100 m along the route. Based on the existing traffic volume monitored, existing width of roads, traffic projections upto December 2024 and additional trucks from Pakri Barwadih coal mine, the carrying capacity has been calculated for December 2024. The resultant future traffic load will vary between 8.4% to 63.8% of the maximum capacity of the road. To

minimise air pollution at the mine and railway sidings, the PP has installed Wind breaker (20' high, 2 km length) along with 10 nos. fixed water sprinklers at Banadag Railway Siding. A mobile water sprinkler has been deployed for the roads. Currently all the trucks / tippers involved in transportation of coal are covered with tarpaulin & stamped. Only Trucks/Tippers with valid PUC certification & fitness certificate and using unadulterated diesel are allowed to ply. Safety measures include installation of speed bumps near settlements, awareness to drivers and local people, deployment of traffic marshals from villages and following a "no horn, low speed" protocol while passing through inhabited stretches and 24 x 7 Ambulance & Crane facility.

Observations and deliberation of the Committee:

15.3.5: The EAC noted the following:

- i. MoEF&CC has granted EC for the Pakri Barwadih Coal Mining Project of M/s NTPC Limited vide letter no. J-11015/692/2007-IA.II(M) dated 19.05.2009 for capacity of 15 MTPA in an area of 3319.42 Ha. Subsequently, various amendments for the same were issued vide letters dated 29.06.2016, 07.12.2017, 14.08.2018, 10.11.2020, 16.08.2023, 09.11.2023 and 15.01.2024.
- ii. Further the PRC enhancement for the project was issued vide letter dated 06.03.2024 for the capacity of 18 MTPA from 15 MTPA in the existing area of 3319.42 Ha and the same was transferred to M/s NTPC Mining Limited vide letter dated 02.05.2024. Subsequently, an amendment in condition pertaining to transportation of coal was again issued vide letter dated 16.07.2024.
- iii. It is observed by the EAC that the project involves total 643.9 Ha of forestland. Stage II FC has been obtained by the proponent.
- iv. The above projects have been implemented and are already under operation.
- v. Specific Condition no. 2A (ix) of EC stipulated that the coal was to be transported from Coal Handling Plant (CHP) to railway siding by closed conveyor belt. The railway siding shall be provided with Silo Rapid Loading System. The timeline for this condition was extended till 31.10.2024, vide various amendments as stated above, subject to the order of Hon'ble Supreme Court w.r.t. Misc. Appeal (MA-001824 dated 18.08.2023) in the matter of Civil Appeal no 6249/2022 (NTPC vs Tripuri Singh Ors) filed by the Project Proponent.

Now, the PP has submitted the proposal for amendment in Specific Condition no. 2A(ix) of EC dated 19.05.2009 (last amended vide EC dated 16.07.2024), regarding the construction of belt conveyor system of a length of 13 km to Banadag railway station and use or Service road/ State highways for transportation of 18 MTPA of coal to Banadag railway siding till 31.12.2024 in place of 31.10.2024 & after that 13 MTPA of coal by belt conveyor and 5 MTPA by Service road/ State highways till 31.03.2026 adopting all mitigative measures to control dust pollution.

A drone video of the developments made in the construction of Coal Handling Plant (CHP) since last amendment granted was presented to the Committee. PP submitted that the construction of Silo Rapid Loading System is in full swing and the complete belt conveyor system is expected to be completed by 31.12.2024. PP mentioned that 99.39% of the civil works have been completed and 100% of structural and electrical and mechanical supply

works have been completed. Further, 87% of the structural erection work is completed. It is observed that momentum of the work has taken place and PP is committed to implement the entire works of belt conveyor system and silo loading by December 2024.

The Committee observed that there is good progress in the construction of the Coal Handling Plant (CHP) and the work is almost on the stage of completion. However, in order to make it operational after completion, it will take some time. In view of this, the Committee opined that PP may be allowed to transport coal through road till 31.12.2024 with all mitigative measures, restricted to the capacity of 15 MTPA only.

- vi. The PP submitted that the conveyor belt being constructed is only for the capacity of 15 MTPA and for another 3 MTPA (i.e., 18 MTPA), engineering designing is under process to make the changes in the conveyor and siding capacity for 18 MTPA. The Committee is of the opinion that a time bound action plan for transportation of additional 3 MTPA coal approved as part of expansion EC of 18 MTPA should be submitted by the PP.
- vii. The Committee deliberated on the air quality data of the concerned area and measures being taken for the same and observed that coal is being transported through covered trucks and trucks being used are with valid PUC and fitness certificate, continuous water sprinkling is being done on the coal transport roads, high throw water sprinklers are installed on both side of siding and 20 ft high wind breaker of 2 km length is erected along the Banadag Railway Siding. In view of this, the Committee opined that all the recommendations made in the Traffic Assessment Study Report shall be complied with inter alia, installation of CAAQMS in the villahges nearby coal transportation road; air pollution mitigation measures alson roads being used for transport and shift to e-/CNG/PNG modes of transport.
- viii. The Committee also deliberated on the certified compliance report from RO and action taken report by the PP of the same and found that the CCR from RO Ranchi was received on 19.06.2024 vide letter no. 103-425/376 and PP submitted ATR on the same on 26.08.2024. There were few partially complied and non-complied conditions observed in the CCR from RO for which PP has submitted the action takn report. However, the Committee is of the opinion that a fresh CCR report for compliance of all the condition of EC must be submitted by the PP by 31.10.2024.
 - ix. The Committee also enquired about the status of court cases pending on the project. The PP submitted that there are total 6 nos. of cases pending at Hon'ble High Court of Jharkhand and total 2 nos. of cases pending at Hon'ble NGT (EZ), Kolkata. PP also displayed a copy of the Court Order during the presentation of the Court case in the matter of Misc. Appeal No. 1824 of 2023 in Civil Appeal No. 6249 of 2021 (NTPC Ltd v. Tripurari Singh and Others) regarding the extension of the timeline for completion of the closed conveyor belt system. PP submitted that the Hon'ble Supreme Court has extended the timeline for completion of the belt conveyor system till 31.12.2024, vide its order dated 29.01.2024 and the matter was disposed of.
 - x. The Committee also deliberated on the compliance of the conditions stipulated in amendment EC dated 16.07.2024. The PP submitted that monthly progress report of the construction of Coal Handling Plant (CHP) is being submitted to the Regional Office and the ICFRE report is in the stage of finalization. The Committee asked the PP to submit the same by 31.10.2024.

- xi. The Committee also noted that the instant amendment proposal was earlier considered by the EAC in its meeting held on 5-7th July, 2024 and EAC has recommended for timeframe till 31/10/2024 in place of 31/12/2024 as sought by the PP. Now PP has again approached for the same amendment.
- xii. The committee noted that Pakri Barwadih Coal Mining Project does not fall under ctitically polluted area and severely polluted area as per CEPI assessmewnt 2018.

Recommendations of the Committee:

15.3.6: After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. J-11015/692/2007-IA.II(M) dated 19.05.2009, as detailed below subject to stipulation of following additional specific conditions. Other terms and conditions prescribed in EC dated 19.05.2009 and its subsequent amendment shall remain unchanged.:

| Reference in EC letter dated 19.05.2009 | Description as per approved EC | Amendment sought in EC | Justification/ Remarks |
|---|--|--|--|
| Specific Condition No2A (ix) | The PP needs to complete the construction of closed belt conveyor system of a length of 13 km to Banadag railway station. The PP is permitted till 31.10.2024 to use Service road/State Highways for transportation of coal to Banadag railway siding. | use Service Road/ State Highways for transportation of 18 MTPA of coal to Banadag railway siding till 31.12.2024 and after that 13 MTPA by Belt conveyor and 5 MTPA by Service Road/State Highways till 31.03.2026 | With regard to the changes in specific condition 2A(ix), Committee is of the opinion to amend specific condition 2A(ix) as follows: "The PP is permitted to use Service Road/ State Highway for transportation of 15 MTPA of Coal to Banadag railway siding till 31.12.2024 adopting all the mitigative measure to control dust pollution." |

Additional Specific Conditions:

- i. A time bound action plan for transportation of additional 3 MTPA coal as part of expansion of EC dated 06.03.2024 from the Coal Handling Plant (CHP) shall be submitted by 31.10.2024.
- ii. Project proponent shall submit a fresh certified compliance report from the concerned Regional Office of the Ministry regarding the compliance of all the stipulated conditions in the exisiting ECs and its subsequent amendments to the Ministry by 31.10.2024.

- iii. Audit report of ICFRE regarding the assessment of efficacy of plantations done by the PP shall be submitted by 31.10.2024.
- iv. Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route shall be monitored and the data shall be submitted along with the six monthly compliance to the concerned Regional Offcie and also kept on the web portal of the company.
- v. All the recommendations made in the Traffic Assessment Study Report regarding coal transportation by road shall be strictly adhered with. PP shall install CAAQMS in the villages nearby the coal transportation road in consultation with the JSPCB. Compliance in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office and also kept on the web portal of the company.
- vi. Additional air pollution control measures should be taken along roads being used for transport of coal including e-/CNG/PNG vehicles.

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

Agenda No. 15.4

15.4: Proposal for amendment in Environment Clearance (EC) of Parsa East and Kanta Basan Pit Head Coal Washery (area 2682.856 Ha having capacity 18 MTPA) by M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited located at Villages: Ghatbarra, Salhi, Kedmaforest, Kete, Mahadevpara, Para, Hariharpur; District: Surguja; State: Chhattisgarh – Regarding Amendment in EC

[On<mark>line Proposal No. IA/CG/CMIN/494543/2024; File No. J-11015/03/2008-IA-II(M)] [Consultant: Vardan Environet LLP NABET/EIA/2326/RA0284 valid up to 04/05/2026]</mark>

15.4.1: The proposal is for amendment in Environment Clearance granted to M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited (RRVUNL) vide letter no. J-11015/03/2008-IA.II(M) dated 14.02.2022 and 12.07.2023 granted to Integrated project of Parsa East and Kanta Basan Pit Head Coal Washery (area 2682.856 Ha having capacity 18 MTPA) located in Villages: Ghatbarra, Salhi, Kedmaforest, Kete, Mahadevpara, Parsa, Hariharpur; District: Surguja; State: Chhattisgarh.

Details of all the prior ECs including the EC for which amendment is sought:

| Sr. | Details of | EC/Expansion | Capacity | Area | Date of | Status of |
|-----|----------------|-------------------|----------|----------|------------|----------------|
| no. | letter no. | EC/Amendment | (MTPA) | (ha) | issuance | implementation |
| | | in EC/validity | | | | |
| | | Transfer/Transfer | | | | |
| | | of EC | | | | |
| | | | Coal | | | |
| | | | Mining | | | |
| | | | and Pit | | | |
| | J- | | Head | | | |
| | 11015/03/2008- | Environment | washery | 2711.034 | | |
| 1 | IA-II (M) | Clearance (EC) | of 10 | На | 21.12.2011 | Implemented |

| Sr. no. | Details of letter no. | EC/Expansion EC/Amendment in EC/validity Transfer/Transfer of EC | Capacity (MTPA) | Area (ha) | Date of issuance | Status of implementation |
|------------|--------------------------|--|---|----------------|------------------|--|
| | | | MTPA | | | |
| | -do- | | 10 | 2711.034 | | Implemented |
| 4 | | EC revalidation | MTPA | На | 25.07.2015 | |
| 6 | -do- | Environmental Clearance Expansion | Coal Mining and Pit Head washery from 10 to 15 MTPA | 2682.856 Ha | 10.08.2018 | Implemented |
| | -do- | EC for expansion | 15 to 18 | 2682.856 | 12.07.2023 | At present |
| 10 | by a complie | of Coal Washery | MTPA = 1 | На | e-Proces | following is the process being adopted at the PEKB mines & washery right from mining of coal & washery to dispatch to end users: ROM Coal of 55000 Tonne/Day from mine is transported to In-pit conveyor at a distance of 0.8 Km to 3.39 Km (average). ROM Coal is crushed at CHP from 100 mm to size -50 mm. From CHP the crushed coal is transported to coal washery of 62000Tonne/Day capacity through conveyor belt |

| Sr. no. | Details of letter no. | EC/Expansion EC/Amendment in EC/validity Transfer/Transfer of EC | Capacity (MTPA) | Area (ha) | Date of issuance | Status of implementation |
|------------|--------------------------|--|--------------------|--------------|------------------|--|
| | e e | of EC | I Y | ES | 4,5 | with different routes of processing plant which is located at a distance of 1 Km. • Washed coal of 42600 Tonne/day is sent to Silo of 4000 Tonne /Hour capacity with the help of 02 Nos. of Stacker Reclaimer of 4000 TPH capacity and other belt conveyor. • The same quantity of washed coal is loaded in roil |
| | | CP | ets of Sh | EN | | loaded in rail wagons for transport to Power plant |

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussion held during the meeting, are given as under:

15.4.2: The PP has now made an online application vide proposal no. IA/CG/CMIN/494543/2024, dated 25.04.2024 for amendment of EC Specific Condition no. xii of EC dated 12.07.2023.

PP has submitted the following amendment along with the justification:

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|------------------|--------------------------------------|
| Specific | Raw coal | Kindly recommend | , |
| Condition no. xii | washed coal | amendment in | and Reject area is spread in approx. |
| | and rejects | Exemption of EC | 31.14 ha. |

| Specific/General | Details of | Amendment Sought | Justification |
|------------------|--|---|--|
| Condition No. | Conditions as per EC | | |
| kxy e-com | shall be stored in covered silos or in dome shaped storage facility. Fixed type-high pressure sprinkle shall be installed in this storage yards. | specific condition no (xii) for 'Clearance Type' of the Environment Clearance dated 12.07.2023 of Parsa East and Kanta Basan (PEKB) Opencast Coal Mine & Washer | At present, handling of washed coal is done by two (2) number of Stackers and Reclaimers with height of boom 30 meters. In order to comply with the EC condition and store coal in a covered silo or dome, a structure of height 30 meter is required to be constructed. Such a high dome structure of 30 m spread over 31.14 ha area is like adding on to a potential safety fire hazard and construction of it in mine active area is also technically unrenderable. Coal is by itself a bad conductor of heat and also possess spontaneous heating property. Together, if it is not ventilated, an occurrence of fire will happen for sure. Hence, covering the whole coal stock in a silo will lead to dows fiery situation. At present following is the process being adopted at the PEKB mines & washery right from mining of coal & washery to dispatch to end users: ROM Coal of 55000 Tonne/Day from mine is transported to In-pit conveyor at a distance of 0.8 Km to 3.39 Km (average). ROM Coal is crushed at CHP from 100 mm to size -50 mm. From CHP the crushed coal is transported to coal washery of 62000Tonne/Day capacity through conveyor belt with different routes of processing plant which is located at a distance of 01 Km. Washed coal of 42600 Tonne/day is sent to Silo of 4000Tonne/Hour capacity with |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|------------------|---|
| | | | the help of 02 Nos. of Stacker Reclaimer of 4000 TPH capacity and other belt conveyor. • The same quantity of washed coal is loaded in rail wagons for transport to Power plant. |

15.4.3: Detail of the court cases:

| Case No. | Court | Brief | Next date of hearing | Decision of court and its compliance |
|----------------------------------|--------------------------------|---|---|---|
| Civil Appeal no(s). 4395 of 2014 | Hon'ble Supreme Court of India | Mr. Sudiep filed an appeal before the NGT Delhi, against order dated 28.03.2012 by the Forest Department, Chhattisgarh. Further against the judgment passed by NGT, RVUNL preferred a civil appeal (CA. no. 4395 of 2014) before the Hon'ble Supreme Court of India. | Last listed on 16.10.2023 – Disposed off | On 13.09.2022 both the matters were listed together and upon mentioning of Sudiep Shrivastava the Court issued notice to Ministry of Coal as a party in DK Soni matter. No direction was passed in FC matter. |
| Writ Petition No. 371 of 2019 | Hon'ble Supreme Court of India | Writ Petition related to PEKB raising issues of: (i) Formation of JV for MDO Operation is against coal block deallocation judgement (ii) washery rejects to private party is causing loss to RVUNL, and in turn, tothe public of Rajasthan (iii) Coal supplied by PEKB coal Block is at very high price than CIL | Last listed on 16.10.2023 – next date of hearing not yet final | The matter is tagged along with the CA No. 4395/2014 and on the last date of hearing i.e. 13.09.2022 Ministry of Coal is made a party for furnishing its response on the issue involved in the Writ Petition. |

| Case No. | Court | Brief | Next date of hearing | Decision of court and its compliance |
|---------------------------------|---|--|---|---|
| Appeal No. 185 of 2018 | National Green Tribunal, New Delhi | price (iv) EC dated 21st December 2011 is not being complied with. The present appeal is filed challenging the Environment Clearance dated 10.08.2018 granted | Last listed on 19.12.2022 – Disposed off | List after the decision of the Hon'ble Supreme Court in Civil Appeal No(s). 4395 of 2014. |
| | | by MOEF for expansion of PEKB from 10 MTPA to 15 MTPA. | | Adjourned sine die. |
| Writ Petition (C) No. 1346/2016 | Hon'ble High Court of Chhattisgarh | The present petition is filed to challenge the order dated 08.1.2016 passed by the District Level Forest Rights Committee (DLC) Sarguja, office of Collector (Tribal Welfare) Ambikapur, District Sarguja. Matter is regarding Forest Rights of the Community over the forest land. | Last listed on 02.05.2024 – Next date of hearing not given | Pleadings are complete and the matter is at the stage of final hearing. No next date is fixed in the matter and shall come up for hearing in due course. Post completion of all pleadings, the court of Registrar-1 of Supreme Court has referred this matter to main bench on 23/11/2016 for final arguments. Presently case is pending before supreme courts after some hearings. |

15.4.4: Written submissions of proponent:

Written submission made by PP are summarized as below:

| S. No. | Raised Points | Reply |
|--------|---------------|---|
| 1. | | The Ambient Air Quality (AAQ) levels of 10 locations ar summarized and Continous air quality reports for last 3 months are submitted. |

| S. No. | Raised Points | Reply |
|--------|---|--|
| | for last 3 months. | |
| 2. | Latest six-monthly compliance report submitted for EC dated 12.07.2023 | Six monthly compliance report for the period October 2023 to March 2024 is submitted. |
| 3. | Origin of the Specific condition xii: "Raw coal washed coal and rejects shall be stored in covered silos or in dome shaped storage facility. Fixed high-type pressure sprinkler shall be installed in this storage yards." | Environment Clearance (EC) of PEKB project was granted for Integrated Mine (ROM) and pit head coal washery for 15 MTPA F. No. J-11015/03/2008-IA-II (M) dated 10.08.2018 and said condition was not mentioned in this EC. After that project proponent applied for expansion for a capacity from 15 MTPA to 21 MTPA pit head coal washery. The EC was granted for 18 MTPA vide F. No. J-11015/03/2008-IA-II (M) dated 12.07.2023. The EIA report submitted for the capacity enhancement did not envisage any provision for covered storage. However, the condition was mentioned in the minutes of the 41st meeting of the Expert Appraisal Committee, held during 13 – 14 March 2023, Agenda No. 41.1. The copy of the minutes of the 41st EAC meeting are submitted. |
| 4. | Mitigation measures for raw coal, washed coal and rejects storage area. | In raw coal, washed coal and reject storage areas adequate moisture will be maintained to ensure that dust is not getting air borne. Fix type sprinkling will be carried out in the open area to arrest fugitive dust. Further, greenbelt is being maintained around the storage areas. |

Observations and deliberation of the Committee:

15.4.4: The EAC noted the following:

i. MoEF&CC has accorded EC for Parsa East and Kanta Basan Opencast Mine and Pit Head Coal Washery vide letter dated 21.12.2011 for the capacity of 10 MTPA in an area of 2711.034 Ha. Subsequently, EC dated 10.08.2018 was granted for expansion in capacity of coal washery from 10 MTPA to 15 MTPA with reduction in area to 2682.856 Ha. EC dated 10.08.2018 superseded all earlier granted EC's and its amendments in terms of Condition no. 12 of the said EC.

- ii. Later another EC was granted to Integrated project of Parsa East and Kanta Basan Open Cast Coal Mine with expansion in Pit head Coal Washery from 15 MTPA to 18 MTPA in total mine lease area of 2682.856 ha vide letter dated 12.07.2023.
- iii. Coal washery with a capacity of 15 MTPA has been implemented and the expansion of coal washery from 15 to 18 MTPA is under implementation.
- iv. Specific Condition no. xii of EC dated 12.07.2023, stipulated that, "raw coal, washed coal and rejects shall be stored in covered silos or in dome-shaped storage facility. Fixed type high-pressure sprinkler shall be installed in this storage yards." The PP justified that the construction of a structure like this is technically unrenderable, as the storage area is spread in approx. 31.14 Ha and the height required for the same is 30 meters. PP further justified that this could also lead to potential safety fire hazard aqs coal is a bad conductor of heat and also possess spontaneous heating property, which is not ventilated can lead to occurrence of fire which will lead to a fiery situation.
- v. The Committee further deliberated on how storage is being handled right now and PP submitted that at present, the handling of washed coal is done by two nos stackers and reclaimers with a height of boom 30 meters. Regarding transportation of the same the PP submitted that, ROM coal from mine is transported to in-pit conveyor, which is crushed at CHP and then the crushed coal is transported to washery through conveyor belt with different routes. Washed coal is then sent to silo with the help of 2 nos of stackers and reclaimer and other belt conveyor and the same is then loaded in railway wagons for transport to the power plants.
- vi. The Committee deliberated on the CCR of the washery and observed that the CTO for 18 MTPA washery is yet to be acquired, hence washery is still operational on 15 MTPA EC.
- vii. The Committee deliberated on the air quality data of the concerned mines for the last 3 months and found it satisfactory based on the data submitted by the PP. The Committee observed that air quality monitoring devices were installed which are connected to the CPCB server and live AAQMS data was displayed in front of the Committee. The data exhibited diuring the meeting are found to be within the NAAQS.
- viii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

Recommendations of the Committee:

15.4.5: After detailed deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. J-11015/03/2008-IA-II(M) dated 12.07.2023 as detailed below. Other terms and conditions prescribed in EC dated 12.07.2023 shall remain unchanged.:

| Reference in EC letter dated 12.07.2023 | Description as per approved EC | Amendment sought in EC | Justification/ Remarks |
|---|---|--|--|
| Specific Condition xii | Raw coal, washed coal and rejects shall be stored in covered silos or in dome-shaped storage facility. Fixed type high-pressure sprinkler shall be installed in this storage yards. | Exemption of EC specific condition no (xii) of Environment Clearance dated 12.07.2023 of Parsa East and Kanta Basan (PEKB) Opencast Coal Mine & Washery. | condition xii, Committee is of the opinion to amend |
| K724 | R I | E STATE | "Raw coal, washed coal and rejects shall be stacked properly at earmarked site within storage yards fitted with wind breakers/shields. Fixed type high-pressure sprinkler shall be installed in this storage yards." |

DAY-2: 19 SEPTEMBER, 2024 [THURSDAY]

Agenda No. 15.5

15.5: Chatti Bariatu Coal Mining Project (area 646.23 Ha having capacity 7 MTPA) by M/s NTPC Mining Limited located at Villages: Chatti Bariatu, Pagar, Jordag; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/493289/2024; File No. J-11015/133/2007-IA.II(M)] [Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.5.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 19.04.2010 for Chatti Bariatu Coal Mining Project (area 646.23 Ha having capacity 7 MTPA) and later re-validated vide letter no. J-11015/133/2007-IA.II(M) dated 03.03.2016. Amendments in this EC were accorded vide letter no. J-11015/133/2007-IA.II(M) dated 01.12.2020 & 05.01.2024. Later, this EC was transferred to NTPC Mining Limited vide letter dated 08.03.2024.

Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| S. No. | Details of Letter No. | EC/Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC | Capacity (MTPA) | Area (MTPA) | Date of issuance | Status of implementation |
|-----------|-----------------------------------|---|--------------------|----------------|------------------|--|
| 1 | J- 11015/133/2007- IA.II(M) | EC | 7 MTPA | 646.23 Ha | 19.04.2010 | Being Implemented |
| 2 | -do- | Revalidation of EC (due to reallotment of coal block in 2015) | 7 MTPA | 646.23 Ha | 03.03.2016 | Being Implemented |
| 3 | -do- | Amendment in EC (Road transport permission granted till 30.11.2023) | 7 MTPA | 646.23 Ha | 01.12.2020 | Implemented |
| 4 | -do- | Amendment in EC (Road transport permission granted till 31.10.2024 by allowing the construction of closed conveyor till 31.10.2024 and siding by 31.03.2026) | 7 MTPA | 646.23 Ha | 05.01.2024 | Implemented |
| 5 | -do- | Transfer in EC (Transfer of EC from NTPC Ltd. to NTPC Mining Limited) | 7 MTPA | 646.23 Ha | 08.03.2024 | Transfer of EC from NTPC Ltd. NTPC Mining Limited. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.5.2: Production Details: PP submitted the actual production details of the concerned mine and submitted that the mine became operational from 25.04.2022 onwards.

Details of the same are as follows:

| Year | Actual Coal Production in MTPA | Planned Coal production in MTPA as per Environmental Clearance | Excess Production |
|---------------------------|--------------------------------|--|-------------------|
| 2022-23 | 0.57 | 7 | NIL |
| 2023-24 | 3.3 | 7 | NIL |
| 2024-25 (till 31.08.2024) | 1.65 | 7 | NIL |

CTO renewal has been obtained from the JSPCB and is valid up to 30.06.2027.

15.5.3: The PP has made an online application vide proposal no. IA/JH/CMIN/493289/2024 dated 04.09.2024 for amendment in EC Specific Condition no. 2A (ix) & (xi) accorded vide letter no. J-11015/133/2007-IA.II(M) dated 19.04.2010, seeking further amendment for extension of timeline to allow transportation of coal by road through covered tippers/ dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori Sidings for supply of coal to Barh STPP and to transport the coal by road to NKSTPP till 31.03.2027. In addition to this, another amendment sought by the PP is to allow the establishment of railway siding by March 2027.

PP submitted the following details for the amendment sought along with the justification:

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|----------------------|--|
| Specific | 2A (ix): "Raw | (a) Change in mode | Delay in construction of Conveyor |
| Condition No | coal from | of transportation of | system |
| 2A (ix) & (xi) | CHP shall be | coal by road through | |
| | transported by | covered | |
| | closed | tippers/dumpers | Pre-requisite to start the construction of |
| | conveyors to | from mine to | CHP is the availability of encumbrance |
| | the railway | Shivpur, Bachra, | free land that is not available for the |
| | siding and | Katkamsandi, | entire stretch of coal evacuation corridor |
| | from there to | Kusmahi, Biratoli & | of CB&KD. For construction of CHP, |
| | linked Barh | Tori Sidings (over a | NTPC had awarded the contract to M/s |
| | STPS by rail. | distance of 26 km, | L&T on 27.09.2019 immediately after |
| | There shall be | 38 km, 95 km, 81 | obtaining the St-II forest clearance on |
| | no road | km, 92 km & 96 km, | 28.08.2019; However, approval of forest |

| Specific/General | Details of | Amendment Sought | Justification |
|------------------|---|---|--|
| Condition No. | Conditions as per EC | | |
| | transportation of coal". 2A (xi): "Company's | respectively) for supply of coal to Barh STPP and to transport of coal by road to NKSTPP (over a distance of | Jharkhand only on 23.12.2021. Subsequently Tree cutting permission was received on 08.03.2022. |
| KYA | Railway siding shall be established within 3 years from date of grant of environmental clearance" | 24 km) till 31.03.2027. | The schedule for construction of CHP is 24 months from the date of front handover. Land Acquisition and R&R issues along the CHP corridor at times have stalled the construction work. Construction work was delayed due to Covid-19 and law & order issue in the area and at times works was stalled by local villagers and even the contractor persons were manhandled. Unfortunately, one executive of a construction agency was shot dead on 19.02.2021 by miscreants. Communication to the Nominated Authority regarding the |
| e-Comi | oliance . | e-Payment | In the EC amendments dated 05.01.2024 and 05.02.2024 for CB & KD CMP, respectively the time for conveyor construction was granted till 31.10.2024. However, due to difference in the rate of land compensation provided by State Govt to landowners of different villages, physical possession of land could not be completed. The conveyor falls in both Hazaribagh and Chatra District. The land compensation rate paid by Chatra District Administration is less than that paid by the Hazaribagh District Administration. Hence, the landowners in Chatra District |
| | | | demanded at par payment with Hazaribagh and did not allow the work to start. This matter was discussed many times at District Administration and State |

| Specific/General | Details of | Amendment Sought | Justification |
|------------------|----------------------|--|---|
| Condition No. | Conditions as per EC | | |
| KY.Y | a liance | P. I V. Andrects of She V. C. C. GREV. | Govt and also flagged at PMG portal. It was deliberated that it is not prudent to make different payments for the same project activity which may result in IR problems. Hence, it was decided to accommodate complete conveyor system in Hazaribagh District. Subsequently, reengineering of the conveyor system has been done with the help of agency to accommodate conveyor system within the Hazaribagh District which further delayed the progress. At present, approx. 73% of conveyor work is completed and the balance work is expected to be completed by Dec' 2025. In addition to the above, law and order situation in the area is hostile and the following incidents have impacted the construction of the conveyor system: • Firing of gunshots at NTPC and MDO officials by unidentified persons • Threatening calls to Head of the Project by extremist groups • Life threats to workmen engaged in construction activities by local villagers • Organization of Mahjutaan/Mahapanchayat by the local politicians by halting the project activities • Setting ablaze the machineries by unknown persons etc. Moreover, the tenure of General Lok Sabha Elections (2024) has resulted in lack of workforce and further, the working hours have also been reduced to almost six hours/day due to resistance of local Villagers. |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|----------------------|--|
| | | | Status of Railway line connecting conveyor The alternate railway alignment for the |
| 6724 | e.V | R IV | Shivpur – Hazaribagh line viz Shivpur – Kathautia was finalized subsequently, and survey work started by Railways only in 2022. DPR for the same is under finalization by Railways. This matter is being regularly followed with Railways, Dhanbad Division and ECR, Hajipur. NTPC has also requested Ministry of Power to co-ordinate with Ministry of Railways for expeditious construction of Railway siding. |
| e.Com | Nov | To Protects if She V | During the recent discussion with ECR, Hajipur it is informed that DPR finalization is expected by Oct' 2024. Considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027. |
| | oliance | e-Payments | Further, it is to mention here that, even if the conveyor construction is completed, the entire system will remain idle until completion of connecting railway system. |

15.5.4: Traffic Assessment Report: Traffic study report has been carried for assessment of impacts due to transportation of coal by road from Chatti Bariatu opencast coal mine project pit head to six railway sidings (Bachra – 38 km, Shivpur – 26 km, Katkamsandi – 95 km, Kusmahi – 81 km, Bira Toli – 92 km and Tori siding – 95 km) and North Karanpura Super Thermal Power Plant (24 km). The present traffic is 896 trucks to and fro towards North Karanpura STPP, Bachra siding and Katkamsandi siding. Additional 416 trucks will move to and fro towards the aforementioned six sidings and North Karanpra STPP. Thus, total 1312 trucks per day will move 19700 TPD of coal from mines. Based on the existing traffic volume monitored, existing width of roads, traffic projections

upto March 2027 and additional trucks of Chatti Bariatu coal mine, the carrying capacity has been calculated for March 2027 and two stretches of roads from near Jordag to near Bhadaikhap totalling around 2 km are not having adequate carrying capacity because width of road is only 5 m. Therefore, NTPC Mining Ltd. has constructed a new road bypassing village Bhadaikhap. In addition to this road, PP also needs to complete the construction of road from village Brinda to Shivpur siding. To minimise air pollution at the mine and railway sidings, the PP has installed Wind breaker, installed fixed water sprinkling system & Fixed type rain-guns and undertaken plantation at Katkamsandi Railway Siding. A PM₁₀ analyser has also been installed at Katkamsandi. At Bachra siding mobile water sprinkler has been deployed and wind breakers have been installed all along the Bachra.

15.5.5: Details of Court Cases: There are no court cases pending on the said proposal.

15.5.6: Monitoring report received from Regional Office, Ranchi: The Ministry is in receipt of monitoring report from Regional Office, Ranchi on 24/09/2024 on the status of compliance of conditions imposed in the EC letter dated 19/04/2010, its revalidation dated 03.03.2016 and amendment in EC dated 05.01.2024 granted by MoEF&CC. As per the said report, following serious partial compliances and non-compliances have been reported by the Regional Office:

- i. Specific condition no.(iii), page no.3; Specific condition no.(xii), page no.6; Specific condition no.(xv), page no.7; additional condition, page no.20: No reclamation of the closed portion of OB dump has been initiated. Therefore, the proponent is instructed to prepare time bound comprehensive plantation plan with native species for protection of the ecology of the surrounding area and post-mining ecological restoration plan and implement on priority
- ii. Specific condition no.(vi), page no.5: The retaining wall is under construction. 250 m long retaining wall has already been constructed. Therefore the proponent is instructed to submit time-bound action plan w.r.t the construction of retaining wall to RO Office.
- iii. Specific condition no.(ix), page no.5, Additional condition no.1.1, page no.21: Work for the construction of closed conveyor under progress has been observed. Therefore, the proponent is instructed to complete the work of construction of closed conveyors on priority and submit its progress along with half-yearly compliance report to RO Office.
- iv. Specific condition no.(xi), page no.6, Additional condition 1.5, page no.22: Work for the construction of railway siding under progress has been observed. Therefore, the proponent is instructed to complete the work of construction of railway siding on priority and submit its progress along with half-yearly compliance report to RO Office.
- v. Specific condition no.(xiii), page no.7; Specific condition no.(xiv), page no.7; Specific condition no. (xxi), page no. 10; Specific condition no. (xxii), page no 10: Construction of 50 KLD ETP has been observed under construction. No rainwater harvesting measures have been implemented at the project site. Therefore, the proponent, is instructed to complete the construction work of ETP and water harvesting structures on priority and submit its progress report to RO Office.

- vi. Specific condition no (xviii), page no.9, Additional condition 1.13, page no.24: The proponent informed that the implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan has been entrusted to the State Forest Department. Therefore, the proponent is instructed to submit progress of implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan to RO Office.
- vii. **Specific condition no. (xxiv), page no. 11:** The proponent informed that these details of environmental activities with expenditure shall be uploaded on the company's website and updated. Therefore, the proponent is instructed to upload details of environmental activities with expenditure on the company's website and submit status to RO Office.
- viii. Specific condition no (xxv), page no. 11: The proponent informed that so far the land compensation amount has been paid Rs. 702.66 acres out of 1071.90 acres. A separate Corpus fund of Rs 5 crores will be created in future after displacement and settlement of the PAFs in R&R colony for maintenance of the R&R colony. However, till date no consent has been received from the villages for R&R colony. Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment. Therefore the proponent is instructed to submit action plan for implementation of R&R on priority to RO Office.
 - ix. Specific condition no. (xxvii), page no 12: The proponent informed that land use pattern shall be prepared for the period 2025-27 in 2025. Therefore, the proponent is instructed to carry out DS once in three years and the same shall be fumished to RO Office.
 - x. General condition no.iii), page no.13; General condition no.iv), page no. 14; General condition no.xv), page no.16: One Continuous Ambient Air Quality Monitoring Station (CAAQMS) to monitor ambient air quality within the mining lease area near Site Office at Pagar. The values on the display of CAAQMS are far lower values hence the proponent was instructed to calibrate the instrument immediately. The display board has not been working on the day of inspection. Therefore, the proponent is instructed to rectify the problem and resume the function of CAAQMS and display board urgently. The proponent is instructed to establish ambient air quality monitoring stations as imposed in the EC and submit details to RO Office.
 - xi. General condition no.ix, page no.15: The proponent informed that regular training on safety & health has been conducted. However, no details have been received in this Office. Further the proponent informed that the occupational health surveillance has been conducted regularly. However, no details have been received in this Office. Therefore the proponent is instructed to submit details of training and occupational health surveillance to RO Office.
- xii. **General condition no.xii, page no.16**: No advertised copies have been received in this Office. Therefore, the proponent is instructed to submit advertised copies to RO Office.
- xiii. **General condition no xviii), page no.17:** No environmental statements in the prescribed Form V for the year 2023-2024 have been observed when visited the website. Therefore, the proponent is instructed to submit environmental statement in the prescribed Form V for the

- MoM of 15th meeting of the EAC for Coal Mining sector held on 18-19th September, 2024
- year 2023-2024 regularly to this Office and also upload all environmental statements in the prescribed Form V on the company's website.
- xiv. **Additional page no. 18:** No copy of revalidation of EC No.J-11015/133/2007-IA II(M) dated 03/03/2016 and its compliance status report has been received in RO Office. Therefore, the proponent is instructed to submit copy of revalidation of EC No.J-11015/133/2007- IA.II(M) dated 03/03/2016 and its compliance status report to this Office for further action.
- xv. Additional condition, page no. 19. Additional condition no.1.4. page no.21, Additional condition no.1.6, page no.22, Additional condition no.1.11, page no.22: The proponent informed that the expected timeline for completion of construction of alternate road before December, 2024. Therefore, the proponent is instructed to submit detailed plan for construction of alternate road along with timeline to RO Office.
- xvi. Additional condition no.1.3, page no 22: The proponent informed that all the necessary permissions have been obtained from the Forest Department for the transportation of coal by road through the forest land However, no details of such permission have been received in this Office. Therefore, the proponent is instructed to submit such all details to RO Office.
- Additional condition no. 1.7, page no.23: The trucks used for transportation of coal are optimally loaded and properly covered with tarpaulin to curb pollution. Further, the coal is being transported with all the necessary permission from the State Government. However, no details of such permission have been received in this Office. Therefore, the proponent is instructed to submit such all details to RO Office.
- Additional condition no.1.8, page no.23: The proponent informed that for installment of fog cannons is under the tendering process and shall be completed within 2 or 3 months. At present, the proponent deployed mobile water tankers for dust suppression. Therefore, the proponent is instructed to install 10 fog cannons and submit its status to RO Office.
 - xix. Additional condition no.1.9, page no.23: No environmental laboratory has been established at the project site. Therefore the proponent is instructed to establish environmental laboratory and submit action plan for establishment of environmental laboratory to RO Office.
 - xx. Additional condition no.1.10, page no 23: No details of deploy of CNG/LNG/e-vehicles for workers/staff in/out of the mine have been received in this Office. Therefore, the proponent is instructed to submit action plan for deploying CNG/LNG/e-vehicles for workers/staff in/out of the mine to RO Office.
 - xxi. Additional condition no. 1.14, page no.25: The proponent has not submitted compliance of EC re-validated dated 03/03//2016 therewith half yearly compliance report to this Office. Therefore, the proponent is instructed to clarify for why was not submitting the compliance status of EC re-validated dated 03/03//2016 to RO Office.

xxii. Additional condition no.1.15, page no.25: The proponent informed that an e-mail request was sent to the Director of Institute of Forest Productivity, Ranchi, Jharkhand, to conduct the studies for evaluating the impact of air pollution generated by the mining activities on the forest up to a distance of about 10 km. Reply is awaited from the Institute of Forest Productivity. Therefore, the proponent is instructed to get study done by the reputed institution/university and submit copy of said study report to RO Office.

Observations and deliberation of the Committee:

15.5.7: The EAC noted the following:

- i. MoEF&CC has granted EC for Chatti Bariatu Coal Mining Project of M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 19.04.2010 for capacity of 7 MTPA in an area of 646.23 Ha. Later this EC was revalidated vide letter dated 03.03.2016. Subsequently, amendments regarding permission for road transport, for the same were issued vide letters dated 01.12.2020 and 05.01.2024.
- ii. Further, this EC was transferred from M/s NTPC Limited to M/s NTPC Mining Limited vide letter no. J-11015/133/2007-IA.II(M) dated 08.03.2024.
- iii. It is observed that there is 128.92 Ha of forestland involved in the said project and stage II FC is accorded on it vide letter dated 13.04.2017.
- iv. The above project is partly implemented and the mine is already under operation.
- v. Specific Condition no. 2A (ix) of EC stipulated that the raw coal from CHP shall be transported by closed conveyors to the railway siding and from there to linked Barh STPP by rail. There shall be no transportation of coal. The timeline for the same was extended until 31.10.2024 (for construction of closed conveyor) vide EC amendment dated 05.01.2024.
- vi. Specific Condition no. 2A (xi) of EC stipulated that the company's railway siding shall be established within 3 years from date of grant of EC. The timeline for the same was extended until 31.03.2026 (for construction of siding) vide EC amendment dated 05.01.2024.
- vii. Now, the PP has submitted the proposal for amendment in Specific Condition no. 2A(ix) & (xi) of EC vide letter dated 19.04.2010 (last amended vide EC letter dated 05.01.2024), regarding the change in mode of transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori Sidings (over a distance of 26 km, 38 km, 95 km, 81 km, 92 km & 96 km, respectively) for supply of coal to Barh STPP and to transport of coal by road to NKSTPP (over a distance of 24 km) till 31.03.2027 instead of 31.10.2024 and 31.03.2026 respectively.

The Committee deliberated on the same observed that the length of conveyor has been declined and that of railway siding has been increased due to the non-availability of land. The PP also submitted that it is being re-engineered and terrain of the same is also being changed. The Committee also observed that there are major changes in transportation route vis-a-vis with transportation route envisaged under the EC dated 19/04/2010.

- viii. PP submitted that in order to start with the construction of CHP, encumbrance free land is required which was not available for the entire stretch of coal evacuation corridor. Hence, contract for construction of CHP could be awarded only after the grant of Stage II FC, approval of forestland transfer by Govt of Jharkhand and tree cutting permission, which were accorded on 28.08.2019, 23.12.2021 and 08.03.2022 respectively.

 Thereafter, land acquisition and R&R issues along with the CHP corridor many a times has stalled the construction work and later COVID-19 and law and order issues of the area further delayed the same. Considering the same, EC amendment was accorded vide letters dated 01.12.2020 and 05.01.2024.
- ix. PP also submitted that law and order situation in the area is hostile and several incidents like firing of gunshots NTPC and MDO officials by unidentified persons, threatening calls to head of the project by extremist groups, life threats to workmen engaged in construction activities by local villagers, organization of Mahjutaan/Mahapanchayat by the local politicians by halting the project activities & setting ablaze the machineries by unknown persons etc, have impacted construction of conveyor system. Moreover, due to political instability there is lack of workforce and working hours are also reduced to 6 hours/ day due to resistance of local villagers.
- x. In pursuance to status of railway line connecting the conveyor (specific condition no. 2A (xi)), PP submitted that survey work for the alternate railway alignment for Shivpur Hazaribagh line viz Shivpur Kathautia was started in 2022 only. Daily Progress Report for the same is under finalization by railways and the matter is being regularly followed-up with railways. PP further submitted that considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027.
- xi. The Committee deliberated on the condition of the roads through which transportation of coal being done currently. The Committee observed that at some places road is passing through forest area. The Committee asked PP to submit a certificate from DFO certifying that no elephant corridor passes through the coal transportation road. Committee also asked the PP to submit a drone video of the roads through which coal is being transported.
- xii. The Committee also deliberated on the air quality monitoring data of the coal transportation roads and observed that the air quality prediction models show levels of pollution almost near the permissible limits, hence high level of pollution, that too away from the coal transportation road. The Committee is of the opinion that this might exceed the annual permissible limits. The Committee therefore, has asked PP to submit a time bound action plan for the mitigation

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measures to be adopted to control the high level of air pollution along with the budget proposed for the same.

- xiii. The Committee also deliberated on the plantation activities done by the PP since the mine is operational and observed that plantation is developed only on the 8 Ha land area. Also, there is no road side plantation observed. PP submitted that plantation drives are being carried out and recently they have also launched the "Ek Ped Maa K Naam" campaign in the villages falling in the purview of lease area. The Committee is of the opinion that the PP must submit a plantation plan along the road side along with the estimated budget for the same.
- xiv. The Committee observed that due to no entry during day time, at some places, transportation of coal by road will take place at night. The Committee deliberated on the noise pollution and air pollution mitigation measures to be adopted in this regard and asked the PP to submit air quality and noise level monitoring data of both during day and night time of the public roads being used for haulage. The air quality monitoring data presented by the PP was for locations not exactly on the road side due to which proper appraisal could not be done.
- xv. The Committee also deliberated on the Traffic Assessment Study carried out by the PP and observed that issues such as air quality and noise level monitored data of both during day and night time of the public roads being proposed for road transportation, incremental impact on the environmental attributes due to road transportation and man-animal conflict during transportation of coal etc. have not been adequately addressed in the study report.
- xvi. The Committee taken in to cognizance the partial compliances and non-compliances reported by the Regional Office of the Ministry in its monitoring report as mentioned at para no. 15.5.6.
- xvii. The Committee observed that conveyor which is under construction for which the extension in timeline is being sought is the common conveyor for the adjoining Kerandari Coal Mine. Both mines are adjacent to each other and the issues are common. The latter is also placed in the same meeting for seeking amendment in the timeline same as that of the instant proposal (Chatti Bariatu Coal Mining Project).

Recommendations of the Committee:

15.5.8: In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal for amendment in EC granted by vide file no. J-11015/133/2007-IA.II(M) dated 19.04.2010 and sought for following additional information for further consideration:

- i. Action taken report on the partial compliances and non-compliances reported by the Regional Office in its monitoring report shall be submitted by the proponent to the concerned RO, MoEF&CC to obtain their views/comments and the same shall be further submitted to the EAC for further consideration.
- ii. Revised traffic assessment study report inter-alia covering the following shall be submitted:

- a. Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route i.e., from mine pit head to six railway sidings and North Karanpura TPP during day and night time.
- b. Anticipated impact on all environmental attributes
- c. Environmental Management Plan including monitoring program to address all concerns arising out of coal transportation by road
- iii. Certificate from DFO shall be submitted stating that coal transport route does not intersect with wildlife corridors.
- iv. Drone video of the entire coal transportation route by road shall be submitted.
- v. No overburden dumping should be done outside the ML area.
- vi. Action plan for reducing the coal transportation by road in a time bound manner.

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

Agenda No. 15.6

15.6: Kerandari Coal Mining Project (area 1173 Ha having capacity 6 MTPA) by M/s NTPC Mining Limited located at Villages: Pandu, Pagar, Basaria, Lochar, Baledori, Kabed, Tarhesa; District: Hazaribagh; State: Jharkhand – Regarding Amendment in EC

[Online Proposal No. IA/JH/CMIN/493281/2024; File No. J-11015/133/2007-IA.II(M)]
[Consultant: Min Mec Consultancy Private Limited NABET/EIA/2225/IA 0096 valid up to 29.03.2025]

15.6.1: The instant proposal is for amendment in Environment Clearance granted to M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M) dated 31.03.2010 for Kerandari Opencast Coal Mining Project (area 1173 Ha having capacity 6 MTPA). Amendment in this EC was accorded vide letter dated 05.02.2024. Later this EC was transferred to M/s NTPC Mining Limited vide letter dated 08.03.2024.

It is to be noted that allocation of Kerandari Coal Block along with 203 other coal blocks was cancelled by the Hon'ble Supreme Court vide Judgement dated 25.08.2014 read with Order dated 24.09.2014. Vide allotment order no. 103/29/2015/NA dated 08.09.2015, re-allocated the Kerandari 'A' coal block (area 1173 Ha having capacity of 6 MTPA) to M/s NTPC Limited. Thereafter, Revalidation/transfer of EC of the said block was granted to NTPC Limited vide letter dated 28.10.2015.

Details of all the ECs including its amendment are summarized as below:

| S. No. | | EC/Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC | | Area (MTPA) | Date of issuance | Status of implementation |
|-----------|-----------------------------------|---|--------|----------------|------------------|--------------------------|
| 1 | J- 11015/133/2007- IA.II(M) | EC | 6 MTPA | 1173 Ha | 31.03.2010 | Being Implemented |

| S. No. | Details of Letter No. | EC/Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC | Capacity (MTPA) | Area (MTPA) | Date of issuance | Status of implementation |
|-----------|--------------------------|---|--------------------|----------------|------------------|--|
| 2 | -do- | Revalidation/ Transfer of EC | 6 MTPA | 1173 Ha | 28.10.2015 | Being Implemented |
| 2 | -do- | Amendment in EC (Road transport granted till 31.10.2024) | 6 MTPA | 1173 На | 05.02.2024 | Being Implemented |
| 3 | -do- | Transfer of EC | 6 MTPA | 1173 На | 08.03.2024 | Transferred from M/s NTPC Ltd to M/s NTPC Mining Ltd |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.6.2: Production Details: PP submitted the actual production details of the concerned mine and submitted that the mine became operational from 05.04.2023 onwards.

Details of the same are as follows:

| Details of the same are as follows: | | | | | | | |
|-------------------------------------|--------------------------------|--|-------------------|--|--|--|--|
| Year | Actual Coal Production in MTPA | Planned Coal production in MTPA as per Environmental Clearance | Excess Production | | | | |
| 2023-2024 | 0.02 | 2 | NIL | | | | |
| 2024-25 (as on date 05.09.2024) | 0.04 | Payments 4 | NIL | | | | |

CTO renewal has been obtained from the SPCB and is valid up to 30.06.2025.

15.6.3: The PP has made an online application vide proposal no. IA/JH/CMIN/4932891/2024 dated 04.09.2024 for amendment in EC Specific Condition no. 2A (xi) & (xiv) accorded vide letter no. J-11015/133/2007-IA.II(M) dated 31.03.2010, seeking further amendment for extension of timeline to allow transportation of coal by road through covered tippers/ dumpers from mine to Shivpur, Bachra, Katkamsandi, Kusmahi, Biratoli & Tori railway sidings for supply of coal to Tanda STPP and to transport the coal by road to NKSTPP till 31.03.2027. In addition to this, another amendment sought by the PP is to allow the establishment of railway siding by March 2027.

PP submitted the following details for the amendment sought along with the justification:

| Specific/General | Details of | Amendment Sought | Justification |
|---|--|---|--|
| Condition No. | Conditions as per EC | | |
| Specific Condition No 2A (xi) & (xiv) | EC Sp. Cond. No 2A(xi) Raw coal from CHP shall be transported by closed conveyors to the railway siding proposed at village Khadamdari and thereafter by rail to the linked Tanda/ | Change in mode of transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Katkamsandi, Kushmahi, Bira Toli & Tori railway sidings for supply of coal to Tanda STPP and transport of coal by road to NKSTPP till 31.03.2027 | Pre-requisite to start the construction of CHP is the availability of encumbrance free land that is not available for the entire stretch of coal evacuation corridor of CB&KD. For construction of CHP, NTPC had awarded the contract to M/s L&T on 27.09.2019 immediately after obtaining the St-II forest clearance on 28.08.2019; However, approval of forest land transfer accorded by Govt of Jharkhand only on 23.12.2021. |
| e-Comit | Barh STPP. The conveyor- cum-rail corridor consisting of a stretch of 13.1 km of rail and 10.5 km of overhead closed conveyors and extend upto unloading part of the railway siding with Silo Loading facilities and from there to the linked Barh STPP/ Tanda by rail. There shall be no road | CPC GREE | Subsequently Tree cutting permission was received on 08.03.2022. The schedule for construction of CHP is 24 months from the date of front handover. Land Acquisition and R&R issues along the CHP corridor at times have stalled the construction work. Construction work was delayed due to Covid-19 and law & order issue in the area and at times works was stalled by local villagers and even the contractor persons were manhandled. Unfortunately, one executive of a construction agency was shot dead on 19.02.2021 by miscreants. Communication to the Nominated Authority regarding the incident had been provided. In the EC amendments dated 05.01.2024 |

| Specific/General Condition No. | Details of Conditions as | Amendment Sought | Justification |
|-----------------------------------|--|--|--|
| by y | transportation of coal. EC Sp. Cond. No. 2A (xiv) Company's Railway Siding at village Khadambari shall be established within 3 years from date of grant of Environmental Clearance. The pp is permitted till 31.10.2024 to use Service road/State Highways for transportation of coal to Banadag railway siding. | P. I V. Andrews of She is Care of Sh | and 05.02.2024 for CB & KD CMP, respectively the time for conveyor construction was granted till 31.10.2024. However, due to difference in the rate of land compensation provided by State Govt to landowners of different villages, physical possession of land could not be completed. The conveyor falls in both Hazaribagh and Chatra District, and the land is acquired under LA Act 1894. The land compensation rate paid by Chatra District Administration is less than that paid by the Hazaribagh District Administration. Hence, the landowners in Chatra District demanded at par payment with Hazaribagh and did not allow the work to start. This matter was discussed many times at District Administration and State Govt and also flagged at PMG portal. It was deliberated that it is not prudent to make different payments for the same project activity which may result in IR problems. Hence, it was decided to accommodate complete conveyor system in Hazaribagh District. Subsequently, re-engineering of the conveyor system has been done with the help of agency to accommodate conveyor system within the Hazaribagh District which further delayed the progress. At present, approx. 73% of conveyor work is completed and the balance work is expected to be completed by Dec' 2025. In addition to the above, law and order situation in the area is hostile and the following incidents have impacted the construction of the conveyor system: |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|-------------------------------------|---|
| by y | Q None | P. I V. Anotects of She v. CAC GREE | Firing of gunshots at NTPC and MDO officials by unidentified persons Threatening calls to Head of the Project by extremist groups Life threats to workmen engaged in construction activities by local villagers Organization of Mahjutaan/Mahapanchayat by the local politicians by halting the project activities Setting ablaze the machineries by unknown persons etc. Moreover, the tenure of General Lok Sabha Elections (2024) has resulted in lack of workforce and further, the working hours have also been reduced to almost six hours/day due to resistance of local Villagers. Status of Railway line connecting conveyor The alternate railway alignment for the Shivpur – Hazaribagh line viz Shivpur – Kathautia was finalized subsequently, and survey work started by Railways only in 2022. DPR for the same is under finalization by Railways. This matter is being regularly followed with Railways, Dhanbad Division and ECR, Hajipur. NTPC has also requested Ministry of Power to co-ordinate with Ministry of Railways for expeditious construction of Railway siding. |

| Specific/General Condition No. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|---------------------------------------|------------------|---|
| KYZ | e-V | R I V | During the recent discussion with ECR, Hajipur it is informed that DPR finalization is expected by Oct' 2024. Considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027. **Further*, it is to mention here that, even if the conveyor construction is completed, the entire system will remain idle until completion of connecting railway system. |

15.6.4: Traffic Assessment Report: Traffic study report has been carried for assessment of impacts due to transportation of coal by road from Kerandari 'A' opencast coal mine project pit head to six railway sidings (Bachra – 40.5 km, Shivpur – 28.8 km, Katkamsandi – 97.6 km, Kusmahi -83.3 km, Bira Toli -94.6 km and Tori siding – 97.9 km) and North Karanpura Super Thermal Power Plant – 26.3 km. Based on the existing traffic volume monitored, existing width of roads, traffic projections upto March 2027 and additional trucks of Kerandari 'A' coal mine, the carrying capacity has been calculated for March 2027 and two stretches of roads from near Jordag to near Bhadaikhap totalling around 2 km are not having adequate carrying capacity because width of road is only 5 m. Therefore, NTPC Mining Ltd. has constructed a new road bypassing village Bhadaikhap. In addition to this road, PP also needs to complete the construction of road from village Brinda to Shivpur siding. To minimise air pollution at the mine and railway sidings, the PP has installed Wind breaker, installed fixed water sprinkling system & Fixed type rain-guns and undertaken plantation at Katkamsandi Railway Siding. A PM₁₀ analyser has also been installed at Katkamsandi. At Bachra siding mobile water sprinkler has been deployed. Wind breakers have been installed all along the Bachra and Tori siding as well.

15.6.5: Details of Court Cases: There are no court cases pending on the said proposal.

15.6.6: Monitoring report received from Regional Office, Ranchi: on the status of compliance of conditions imposed in the EC letter dated 31/03/2010, transfer/ revalidation of EC dated 03.03.2016

and amendment in EC dated 05.02.2024 granted by MoEF&CC. As per the said report, following glaring partial compliances and non-compliances have been reported by the Regional Office:

- i. **Status of EC, page no.2:** No copy of transfer revalidation of EC No.J-11015/120/2007-IA.II(M) dated 28/10/2015 and all copies of CTES/CTOs have been received in RO Office. Therefore the proponent is instructed to submit transfer / revalidation of EC No.J-11015/120/2007-IA II(M) dated 28/10/2015 and all copies of CTES/CTOS to RO Office.
- ii. **Specific condition no.ii, page no.2:** The proponent informed that State Water Resources Department vide letter dated 19/3/2013 approved for the diversion of Baldeori nala, which is yet to be diverted. Therefore, the proponent is instructed to submit time bound plan for the diversion of Baldeori nala and construction of embankment, details of plantation, etc., to RO office.
- Specific condition no.iv, page no.3; Specific condition no.xii, page no.7; Specific condition iii. no.xxiii, page no.9; Specific condition no.xxi, v page no.10: No reclamation of the closed portion of OB dump has been initiated. Therefore, the proponent is instructed to prepare time bound comprehensive plantation plan with native species for protection of the ecology of the surrounding area and post-mining ecological restoration plan. The proponent should submit the detailed plan in tabular format (year-wise for life of mine) for afforestation and green belt development in and around the mining lease. The proponent should submit the number of saplings to be planted, area to be covered under afforestation and green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this, the proponent should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided. In addition to this, plantation in the safety zone at lease boundary the plantation should be planned in such a way that it should be completed within 2 years only.
- iv. **Specific condition no.viii, page no.5**: No retaining wall has been observed. Therefore, the proponent is instructed to submit the comprehensive action plan for the construction of retaining wall to RO Office.
- v. Specific condition no.xiii, page no.5, Additional condition no.1.1, page no.20: Crushers are yet be constructed. The proponent informed that the optimum loaded tarpaulin covered trucks have used for transportation of coal. Mobile water tankers have been deployed for dust suppression along the transportation route. Therefore, the proponent is instructed to complete the construction of crushers on priority and submit detailed timeline for the construction crushers at CHP to RO Office.
- vi. Specific condition no xiv, page no.6, Additional condition no.1.6, page no.21; Additional condition no.1.8. page no.21: Work for the construction of railway siding under progress has

been observed. The proponent informed that the amendment in EC has been obtained from MoEF&CC vide letter dated 05/01/2024 for completing the for construction of railway siding by March 2025 and construction of closed belt conveyor upto October, 2024. Therefore, the proponent is instructed to complete the work of construction of railway siding on priority and submit its progress report to RO Office.

- vii. Specific condition no.xvii, page no.8; Specific condition no xxi, page no.8: No rainwater harvesting structures have been observed in the mine premise. The proponent informed that the rainwater harvesting structures shall be established within 2 or 3 months. The water requirement of the nearby villages shall be met in case the village wells go dry due to dewatering of mine. Therefore, the proponent is instructed to construct rainwater harvesting structures in consultation with CGWA/ State Water Resources Department and submit its detail to RO Office.
- viii. Specific condition no.xix, page no.8; Specific condition no.xxii, page no.9; General condition no.vi, page no. 15: ETP without oil/grease traps on has been constructed. Therefore, the proponent is instructed to install oil/grease traps on priority and submit action taken report to RO Office.
 - ix. Specific condition no.xx, page no.8: No STP has been provided. Therefore the proponent is instructed to provide STP on priority basis and submit action taken report to RO Office.
 - x. Specific condition no xxv, page no.10: Wildlife Conservation Plan and Site-Specific Wildlife Management Plan have been prepared and approved by the State Chief Wildlife Warden. Copies of plans have been received in this Office. It was informed that for implementation of site-specific wildlife management plan Rs. 24.76 Crores was deposited in the ad-hoc CAMPA account. Therefore, the proponent is instructed to submit progress report of implementation of Wildlife Conservation Plan and Site-Specific Wildlife Management Plan to RO Office.
- xi. Specific condition no xxvi, page no.11: The proponent earmarked separate budget for implementing environmental measures. The details of expenditure on environmental activities for FY 2023- 2024 have not been received in RO Office. The proponent informed that these details of activities with expenditure shall be uploaded on the company's website and updated. Therefore, the proponent is instructed to upload details of environmental activities with expenditure on the company's website and submit status to RO Office.
- xii. **Specific condition no.xxvii, page no. 11:** Alternate livelihood schemes shall be implemented for the persons not being absorbed for employment. Therefore, the proponent is instructed to submit action plan for implementation of R&R on priority to RO Office.

- xiii. **Specific condition no.xxxi, page no. 12:** The proponent informed that land use pattern shall be prepared for the period 2025-27 in 2025. Therefore, the proponent is instructed to carry out DS once in three years and the same shall be furnished to RO Office.
- xiv. General condition no.iii, page no.13; General condition no.vili, page no. 15, General condition no.xv, page no. 17: No four ambient air quality monitoring stations have been established. However, one Continuous Ambient Air Quality Monitoring Station (CAAQMS near Site Office has been installed and. The values on the display of CAAQMS are far lower values hence the proponent was instructed to calibrate the instrument immediately. The display board has not been working on the day of inspection. Therefore, the proponent is instructed to rectify the problem and resume the 3 Page function of CAAQMS and display board urgently. The proponent is instructed to establish ambient air quality monitoring stations as imposed in the EC and submit details to RO Office.
- xv. General condition no.ix, page no. 16: The proponent informed that regular training on safety & health has been conducted. However, no details have been received in this Office. Further the proponent informed that the occupational health surveillance has been conducted regularly. However, no details have been received in this Office. Therefore the proponent is instructed to submit details of training and occupational health surveillance to RO Office.
- xvi. **General condition no.xii**, page no.16: No advertised copies have been received in this Office. Therefore, the proponent is instructed to submit advertised copies to RO Office.
- V for the year 2023-2024 have been observed when visited the website. Therefore, the proponent is instructed to submit environmental statement in the prescribed Form V for the year 2023-2024 regularly to RO Office and also upload all environmental statements in the prescribed Form V on the company's website Office.
- xviii. Additional condition no. 1.14, page no.23: No copy of transfer / revalidation of EC No.J-11015/133/2007-IA.II(M) dated 28/10/2015 and its status of compliance has been received in this Office. Therefore the proponent is instructed to copy of copy of transfer / revalidation of EC No.J-11015/133/2007-IA.II(M) dated 28/10/2015 and its status of compliance to RO Office.
 - xix. Additional condition no. 1.9, page no.21: The proponent informed that for instalment of fog cannons is under the tendering process and shall be completed within 2 or 3 months. At present, the proponent deployed mobile water tankers for dust suppression. Therefore, the proponent is instructed to install 10 fog cannons and submit its status to RO Office.
 - xx. **Additional condition no. 1.11. page no.22**: The proponent informed that there are no CNG/LNG/recharge stations located near the mine site. BS VI tippers have been used for transportation of coal to minimize the emissions. No details of deploy of CNG/LNG/e-vehicles

for workers/staff in/out of the mine have been received in this Office. Therefore, the proponent is instructed to submit action plan for deploying CNG/LNG/e-vehicles for workers/staff in/out of the mine to RO Office.

- Additional Condition no. 1.12, page no. 22: No details of engage the State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market have been received in this Office. Therefore, the proponent is instructed to submit progress of implementation of Wildlife Conservation Plan along with details of expenditure and details of engage the State Biodiversity Authority and local biodiversity committee for implementation of CSR activity for developing the local market to RO office.
- xxii. Additional condition no. 1.15, page no 23: No Copy of study on evaluating the impact of air pollution generated by its activities on the forests upto a distance of about 10 km have been received in this Office. Therefore, the proponent is instructed to get study done by the reputed institution/university and submit copy of said study report to RO office.

Observations and deliberation of the Committee:

15.6.7: The EAC noted the following:

- i. MoEF&CC has granted EC for Kerandari Opencast Coal Mining Project of M/s NTPC Limited vide letter no. J-11015/133/2007-IA.II(M), dated 31.03.2010 for capacity of 6 MTPA in an area of 1173 Ha. Later this EC was revalidated/ transferred vide letter dated 28.10.2015 (since it was de-allocated vide the Judgement of Hon'ble Supreme Court and then further reallocated vide allotment order MOC to M/s NTPC Limited). Further, amendment in EC was granted to permit the transportation of coal by road till 31.10.2024 vide letter dated 05.02.2024 and later this EC was transferred to M/s NTPC Mining Limited vide letter dated 08.03.2024.
- ii. The above project is partly implemented and is already under operation.
- iii. It is observed that the said project involves 243.32 Ha of forestland and stage II on the same was accorded vide letter dated 28.08.2019.
- iv. Specific Condition no. 2A (xi) of EC stipulated that the raw coal from CHP shall be transported by closed conveyors to the railway siding proposed at village Khadamdari and thereafter by rail to the linked Tanda/ Barh STPP. The conveyor-cum-rail corridor consisting of a stretch of 13.1 km of rail and 10.5 km of overhead closed conveyors and extend upto unloading part at the railway siding with Silo Loading facilities and from there to the linked Barh STPS/ Tanda by rail. There shall be no road transportation of coal. The timeline for the same was extended until 31.10.2024 (for construction of closed conveyor) vide EC amendment dated 05.02.2024.

- v. Specific Condition no. 2A (xiv) of EC stipulated that the company's railway siding at village Khadambari shall be established within 3 years from date of grant of EC. The timeline for the same was extended until 31.03.2025 (for construction of railway siding) vide EC amendment dated 05.02.2024.
- vi. Now, the PP has submitted the proposal for amendment in Specific Condition no. 2A(xi) & (xiv) of EC vide letter dated 31.03.2010 (last amended vide EC letter dated 05.02.2024), regarding change in mode of transportation of coal by road through covered tippers/dumpers from mine to Shivpur, Bachra, Katkamsandi, Kushmahi, Bira Toli & Tori railway sidings for supply of coal to Tanda STPP and transport of coal by road to NKSTPP till 31.03.2027 instead of 31.10.2024 and 31.03.2025 respectively.
 - The Committee deliberated on the same observed that the length of conveyor has been declined and that of railway siding has been increased due to the non-availability of land. The PP also submitted that it is being re-engineered and terrain of the same is also being changed.
- vii. PP submitted that in order to start with the construction of CHP, encumbrance free land is required which was not available for the entire stretch of coal evacuation corridor. Hence, contract for construction of CHP could be awarded only after the grant of Stage II FC, approval of forestland transfer by Govt of Jharkhand and tree cutting permission, which were accorded on 28.08.2019, 23.12.2021 and 08.03.2022 respectively.

 Thereafter, land acquisition and R&R issues along with the CHP corridor many a times has stalled the construction work and later COVID-19 and law and order issues of the area further delayed the same. Considering the same, EC amendment was accorded vide letter dated 05.02.2024.
- viii. PP also submitted that law and order situation in the area is hostile and several incidents like firing of gunshots NTPC and MDO officials by unidentified persons, threatening calls to head of the project by extremist groups, life threats to workmen engaged in construction activities by local villagers, organization of Mahjutaan/ Mahapanchayat by the local politicians by halting the project activities & setting ablaze the machineries by unknown persons etc, have impacted construction of conveyor system. Moreover, due to political instability there is lack of workforce and working hours are also reduced to 6 hours/ day due to resistance of local villagers.
- ix. In pursuance to status of railway line connecting the conveyor (specific condition no. 2A (xiv)), PP submitted that survey work for the alternate railway alignment for Shivpur Hazaribagh line viz Shivpur Kathautia was started in 2022 only. Daily Progress Report for the same is under finalization by railways and the matter is being regularly followed-up with railways, Dhanbad Division and ECR, Hajipur. PP further submitted that considering the Land Acquisition, Forest Clearance and other construction activities, it will take around 30 months from the date of DPR approval on best effort basis. Accordingly, the work is expected to be completed by March 2027.

- x. The Committee deliberated on the condition of the roads through which transportation of coal being done currently. The Committee observed that at some places road is passing through forest area. The Committee asked PP to submit a certificate from DFO certifying that no elephant corridor passes through the coal transportation road. Committee also asked the PP to submit a drone video of the roads through which coal is being transported.
- xi. The Committee also deliberated on the air quality monitoring data of the coal transportation roads and observed that the air quality prediction models show levels of pollution almost near the permissible limits, hence high level of pollution, that too away from the coal transportation road. The Committee is of the opinion that this might exceed the annual permissible limits. The Committee therefore, has asked PP to submit a time bound action plan for the mitigation measures to be adopted to control the high level of air pollution along with the budget proposed for the same.
- xii. The Committee also deliberated on the plantation activities done by the PP since the mine is operational and observed that plantation developed till now is not adequate. Also, there is no road side plantation observed. PP submitted that plantation drives are being carried out and recently they have also launched the "Ek Ped Maa K Naam" campaign in the villages falling in the purview of lease area. The Committee is of the opinion that the PP must submit a plantation plan along the road side along with the estimated budget for the same.
- xiii. The Committee observed that due to no entry during day time, at some places, transportation of coal by road will take place at night. The Committee deliberated on the noise pollution and air pollution mitigation measures to be adopted in this regard and asked the PP to submit air quality and noise level monitoring data of both during day and night time of the public roads being used for haulage. The air quality monitoring data presented by the PP was for locations not exactly on the road side due to which proper appraisal could not be done.
- xiv. The Committee also observed that OB dumping is being done outside the ML area (in the adjoining mine lease area, i.e., Chatti Bariatu Mine lease) and is of the opinion that the same should be immediately stopped and should be restricted to ML area only.
- xv. The Committee also deliberated on the Traffic Assessment Study carried out by the PP and observed that issues such as air quality and noise level monitored data of both during day and night time of the public roads being proposed for road transportation, incremental impact on the environmental attributes due to road transportation and man-animal conflict during transportation of coal etc. have not been adequately addressed in the study report.
- xvi. The Committee taken in to cognizance the partial compliances and non-compliances reported by the Regional Office of the Ministry in its monitoring report as mentioned at para no.15.6.6.
- xvii. The Committee observed that conveyor which is under construction for which the extension in timeline is being sought is the common conveyor for the adjoining Chatti Bariatu Coal Mining Project. Both mines are adjacent to each other and the issues are common. The latter is also

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placed in the same meeting for seeking amendment in the timeline same as that of the instant proposal (Kerandari Coal Mining Project).

Recommendations of the Committee:

15.6.8: In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal for amendment in EC granted vide file no. -11015/133/2007-IA.II(M) dated 31.03.2010 and sought for following additional information for further consideration:

- i. Action taken report on the partial compliances and non-compliances reported by the Regional Office in its monitoring report shall be submitted by the proponent to the concerned RO, MoEF&CC to obtain their views/comments and the same shall be further submitted to the EAC for further consideration.
- ii. Revised traffic assessment study report inter-alia covering the following shall be submitted:
 - a. Ambient Air Quality (AAQ) and Noise quality data along the entire coal transportation route i.e., from mine pit head to six railway sidings and North Karanpura TPP during day and night time.
 - b. Anticipated impact on all environmental attributes
 - c. Environmental Management Plan including monitoring program to address all concerns arising out of coal transportation by road
- iii. Certificate from DFO shall be submitted stating that coal transport route does not intersect with wildlife corridors.
- iv. Drone video of the entire coal transportation route by road shall be submitted.
- v. No overburden dumping should be done outside the ML area.
- vi. Action plan for reducing the coal transportation by road in a time bound manner.

In addition to the above, the EAC also recommended for a site visit by the sub-committee for on spot assessment of various environmental conditions.

Agenda No 15.7

15.7: Pathora West Coal Block (Sohagpur Coalfield) (area 554.0843 Ha having capacity 0.8 MTPA) by M/s Shri Bajrang Power and Ispat Limited located at Villages: Gitori, Ghunghuti, Patnarkala; District: Umaria; State: Madhya Pradesh – Prescribing of Terms of Reference – reg.

[Proposal No. IA/MP/CMIN/492431/2024; File No. IA-J-11015/63/2024-IA.II(M); Consultant: Ecomen Mining Pvt. Ltd. Lucknow; NABET/EIA/2022-25/SA 0219, Valid till 22.03.2025 as on 04.09.2024]

15.7.1: M/s. Shri Bajrang Power and Ispat Limited has made an online application for ToR vide proposal no. IA/MP/CMIN/492431/2024 dated 04.09.2024 along with the application in prescribed format Form-I (CAF, Part A and Part B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no 1(a) Under Category "A" (> 500 Ha) of the schedule of the EIA Notification, 2006 and appraised at the Central Level.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussion held during the meeting, are given as under:

15.7.2: The Proposed Pathora West Coal Block (Sohagpur Coalfield)' with an area of 640.520 Ha and Project area 554.0843 Ha and targeted Production capacity of 0.80 MTPA (Peak-rated capacity of 1.2 MTPA) by M/s Shri Bajrang Power and Ispat Limited is located in the Villages of GhunGhuti, Githauri, and PatnarKalan, Tehsil Pali, District Umaria, and State Madhya Pradesh.

15.7.3: Environmental site settings:

The project area is covered under Survey of India Topo sheet No. F44D3 (64E3). and is bounded by the geographical coordinates with Latitude 23° 21' 0.3940" N to 23° 22' 10.1617" N and Longitude 81° 10' 22.3570" E to 81° 12' 24.7285" E. Project does not fall in the Critically Polluted Area (CPA)/Severely Polluted Area (SPA) as per CEPI Assessment, 2018.

Forest Area: The project involved total 140.8988 Ha of forest land. The details of the approval already obtained are as follows:

| S. No. | Nature of Land involved | Area in Ha | Status of FC/remarks |
|--------|-------------------------|------------|--|
| i. | Non-Forest Land (A) | 404.3965 | - |
| ii. | Forest Land (B) | 140.8988 | Stage I FC applied for 149.6878 Ha area vide proposal no. FP/MP/MIN/QRY/464461/2024 dated 02.03.2024 |
| iii. | Revenue Forest (C) | 8.789 | S |
| | Total Land (A+B+C) | 554.0843 | |

Protected Area: PP submitted that the project is not located within 10 KM of any ESZ/ ESA national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc. In case any schedule-I species observed, conservation plan will be prepared for approval from PCCF/CWLW.

15.7.4: Mine lease: The mining block of Pathora West Coal Block, which lies in Sohagpur Coalfield and covers a mining leasehold area of about 554.0843 ha in Umaria District of Madhya Pradesh, has been allocated to M/s Shri Bajrang Power and Ispat Limited via Letter No. NA-104/29/2023-NA dated December 14, 2023, by the MoC, GoI. The original block area allotted to the company was 640.52 ha, but after scrutiny of mining plan by CCO, New Delhi, the project area reduced to 554.0843 Ha. Details of the mine lease submitted by the PP are as follows:

| S. No | Govt. Order/Notifications as the case may be | Area(ha) |
|-------|--|----------|
| 1. | Coal Block Area | 640.520 |
| 2. | Project Area | 554.0843 |
| 3. | Mining Lease Area | 554.0843 |

15.7.5: Mining Plan: PP submitted that Mining Plan along with mine closure plan for Pathora West Coal Block (Sohagpur Coalfield) Project was approved by Ministry of Coal for the capacity 0.80 MTPA (Peak Rated Capacity 1.20 MTPA), area 554.0843 Ha area vide letter dated 28.08.2024.

- i. Method of Mining to be adopted shall be underground. The Capacity of the mine applied for peak capacity as per approved mining plan is 1.2 MTPA.
- ii. Excavation of Coal is through shovel/dumper combination/ Surface Miner. The waste/OB handling is with shovel/dumper combination/dragline etc.
- iii. The estimated gross geological reserves of the Pathora Underground Coal Block are 90.1227 million tons. Out of this, the net geological reserves considered for underground mining are 81.1149 million tons. Mineable reserves are 72.4163 million tons and corresponding extractable reserve of the block is 37.155 million tons. The overall quality of the coal is G8. Gradient will be Incline 1 & 2 1:5 Shaft 1 & 2 Vertical
- iv. 10 no. of coal seams with thickness ranging from 0.07m to 7.66 m are workable. Grade of coal is 5088 kcal/kg or G-8 Grade, Gradient will be Incline 1 & 2 1:5 Shaft 1 & 2 Vertical. There are ten workable seams, namely III TOP, III BOT, III COMP, IIA, II TOP, II BOT, II COMP, IB TOP, IB-BOT, and IB COMP.
- v. Life of mine is 50 years as per mining plan.
- vi. The project has no external OB dumps. One internal dump in an area of 0.8750 Ha with 101118.3545 m³ of OB is envisaged in the project.
- vii. Details of Land usage:

a. Present land-use and occupancy of pathora west underground coal block

| Sl.No | Description | Area in Ha | | | |
|-------|--|------------|--|--|--|
| | Private Land | | | | |
| 1 | Agriculture (including residential houses) | 360.5065 | | | |
| | Township | 0.1210 | | | |
| | Government-non-Forest land | | | | |
| | Agriculture | 5.0650 | | | |
| | Road | 7.3592 | | | |
| 2 | River/nala | 14.5700 | | | |
| | Water Bodies | 4.8040 | | | |
| | Grazing | 8.7288 | | | |
| | Community/others | 3.2420 | | | |
| | Forest Land | | | | |
| 3 | Revenue forest | 8.7890 | | | |
| | Reserve forest | 140.8988 | | | |
| | Total | 554.0843 | | | |

b. Pre-mining Land Use

| Sr. no. | Namer of the villages & Forest range | Private Land (in Ha) | Govt. Land (in Ha) | Forest Land (in Ha) | Total area (in Ha) |
|------------|--------------------------------------|----------------------------|--------------------|---------------------|--------------------|
| 1. | Githouri | 58.368 | 6.119 | - | 64.487 |
| 2. | Ghunghuti | 287.4865 | 34.669 | - | 322.1555 |
| 3. | Patnarkala | 25.655 | 0.888 | - | 26.543 |
| 4. | Forest Range Ghunghuti | e-K. - | - | 140.8988 | 140.8988 |
| | | I | / | Total | 554.0843 |

c. Post Mining

| Sr. <mark>No</mark> | Description | Area in Ha |
|---------------------|---|------------|
| 1 | UG Entry | 0.600 |
| 2 | Top Soil Dump | 0.8750 |
| 3 | Diversion Or Below River or Nala or Canal | 19.374 |
| 4 | Settling pond | 0.2815 |
| 5 | Safety Zone | 3.4305 |
| 6 | Infrastructure area | 19.500 |
| 7 | Green Belt | 6.0409 |
| 8 | Undisturbed Area | 503.9824 |
| | Total | 554.0843 |

i. **Details of transportation of Coal**: Transport of coal from the face will be by Shuttle Car (SC). SC will feed a feeder breaker. Feeder breaker will feed the crushed coal into a district gate belt and coal will be evacuated to the surface through series of trunk belts in below ground workings and main trunk belts in the Incline 2.

| S. No | Parameter | Details of Transportation |
|-------|-------------------------------|-----------------------------|
| i. | In pit | By Road cum Rail (RCR) mode |
| i. | Surface to siding | By Road cum Rail (RCR) mode |
| i. | Siding to loading | Existing |
| v. | Quantity being transported by | 0.80 |
| | Road/Rail/conveyer/ropeway | |

| S. No | Parameter | Details of Transportation |
|-------|--|--|
| v. | Proposed change in transportation means if any, give details | A two-lane road of about 104 meters in length will be constructed to connect NH 78 to the infrastructure area proposed near the incline mouth for transportation of coal. An area of 1.11 ha is proposed for the staking of coal near the incline mouth. |

- ii. There are 3 villages within the project area namely Ghun Ghuti, Githauri, and Patnar Kalan. Mining will be underground, hence shifting of villages is not applicable.
- iii. Afforestation shall be done progressively covering an area of: 6.0409 ha at the end of mining comprising of 0.8750 ha of internal dump.
- **15.7.6:** Baseline Studies: Baseline data generated from 1st March to 31st May 2024. PP reported that the Laboratory involved in analysis of water, air, noise & soil quality data, etc. has been accredited by the NABL/ MoEF&CC bearing the Certificate of Accreditation with conformance of ISO 17025:2005 vide no. TC-7470 valid up to 03.10.2026.
- 15.7.7: Water requirement: PP submitted the estimated water requirement is 773 KLD. Industrial water requirements will be met from existing reservoirs, groundwater, and mine water sources. Potable water requirements will be met from groundwater sources with appropriate treatment.

| S. No. | Purpose | Water Requirement (KLD) | Source |
|-----------|---|---------------------------------|-------------------|
| 1 | Mines operation (Machineries) | 550 | Underground Water |
| 2 | Dust Suppression (Surface) | 70 | 7 |
| 3 | Plantation | 81 | |
| 4 | Vehicles Washings & Workshops | chicles Washings & Workshops 20 | |
| 5 | Domestic Purpose including surrounding villages | 52 | Borewell |
| | Total | 773 | |

15.7.8: Solid and hazardous Waste generation: The details of solid and hazardous waste generation along with its mode of treatment/disposal submitted by the PP is furnished as below:

| Sl No | Type of Waste | Source | Quantity (TPA) | Mode of Treatment | | Disposal | | Remarks | |
|----------|------------------|--------------|-------------------|----------------------|-------|-----------|-------|---------|----------|
| 1 | Rejection/ | During | 804104.8569 | The | solid | The | solid | The | liquid |
| | | Mining | cum | waste pro | duced | waste pro | duced | waste | , like |
| | overburden | incline | | during | these | during | these | used | engine |
| | | drivages and | | drivages | will | drivages | will | oil, g | ear oil, |

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| Sl | Type of | Source | Quantity | Mode of | Disposal | Remarks |
|----|---------|-----------------|----------|-----------------|-----------------|--------------|
| No | Waste | | (TPA) | Treatment | | |
| | | shaft sinking | | be separately | be separately | brake oils, |
| | | in the sub-soil | | stacked on the | stacked on the | and other |
| | | and in hard | | surface and | surface and | lubricants, |
| | | rocks and | | used in | used in | will be |
| | | also from | | embankment | embankment | stored in |
| | | drivages of | | for preparation | for preparation | separate |
| | | cross-cuts in | | of bank heads, | of bank heads, | tins, drums, |
| | | hard rock | | filling of low- | filling of low- | and cans |
| | | N. | | lying areas, | lying areas, | and sent to |
| | | 6 | | development of | development of | the main |
| | | | | the land/road | the land/road | stores for |
| | | | | for | for | disposal by |
| | | | | infrastructure, | infrastructure, | to the |
| | | | | and | and | authorized |
| | | | | development of | development of | recyclers. |
| | | | | greenery. | greenery. | |
| | 2 | | 400 | 1 | | |

- 15.7.9: R&R Plan: Being Underground Mine, R & R not applicable.
- **15.7.10: Project Cost:** PP submitted the estimated project cost to be Rs. 613.73 Crores. EMP cost shall be Rs. 30.0 Crores and recurring cost shall be Rs. 5.1 Crores.
- **15.7.11:** Geenbelt: The mine area of the project is 554.0843 ha, out of which plantation will be done in a phased manner in an area of 6.0409 ha.
- **15.7.11:** Benefit of the project: Proposed project will provide employment opportunities in the region & local infrastructure including ancillary development and supporting other infrastructure by Project CSR & CER Activity by Shri Bajrang Power and Ispat Limited in the local region.
- **15.7.12:** Legal Issues/ Violation: PP submitted that there is no legal issue/violation w.r.t Environment (Protection) Act, Air (P&CP) Act, Water (P&CP), Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam, Wildlife Protection Act, MMDR Act, and Factories Act. Further, there is no court case against the proposed project.

Observations and deliberations of the EAC

15.7.13: The Committee noted the following:

- i. Proposal is a green-field project for grant of Terms of Reference (ToR) to Pathora West Coal Block (Sohagpur Coalfield) (area 554.0843 Ha) having capacity 0.8 MTPA (Peakrated capacity of 1.2 MTPA) by M/s Shri Bajrang Power and Ispat Limited located at Villages: Gitori, Ghunghuti, Patnarkala; District: Umaria; State: Madhya Pradesh.
- ii. Total mine lease area is 554.0843 ha. Project does not fall in the Critically Polluted Area (CPA)/Severely Polluted Area (SPA) as per CEPI Assessment, 2018. Out of 554.0843 ha mine lease area, 149.6878 ha (Forest Land: 140.8988 ha + Revenue Forest: 8.789 ha) area is forest area.
- iii. Project is not located within 10 KM of any ESZ/ ESA national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/tiger corridor/elephant corridor etc.
- iv. Mining Plan along with mine closure plan for Pathora West Coal Block (Sohagpur Coalfield) Project was approved by competent authority for 0.80 MTPA (Peak Rated Capacity 1.20 MTPA) within 554.0843 Ha mining lease area of 640.520 ha coal block area vide letter no. MINEMPMP043/APP00289/2024, dated 28.08.2024.
- v. Method of mining shall be underground. The Capacity of the mine applied for peak capacity as per approved mining plan is 0.80 MTPA (Peak-rated capacity of 1.2 MTPA). The life of mine is 50 years as per approved mining plan.
- vi. The estimated gross geological reserves of the Pathora Underground Coal Block are 90.1227 million tons. Out of this, the net geological reserves considered for underground mining are 81.1149 million tons. Mineable reserves are 72.4163 million tons and corresponding extractable reserve of the block is 37.155 million tons. The overall quality of the coal is G8.
- vii. There are 3 no of villages within the mining lease area namely GhunGhuti, Githauri, and PatnarKalan. Mining will be underground and hence, no any villages will be shifted in due course of mining and no R&R in involved in the proposed project.
- viii. Proposal does not involves diversion of River, Nallah, High-Tension/ Transmission Line within the project boundary.
 - ix. The total estimated project cost is Rs. 613.75 Cr. The capital cost for environmental management of the proposed project is estimated to be Rs. 30.0 Crores and Rs. 5.1 Crores will be required as annual recurring expenses.
 - x. No any litigations, Court/NGT, violation cases are pending against the proposed project.

Recommendations of the Committee

15.7.14: EAC after detailed deliberations, under the provision of EIA Notification 2006 and as amended, **recommended** the proposal for grant of Terms of Reference (ToR), as applicable to the project, with Public Consultation and following Specific ToR to M/s **Shri Bajrang Power and Ispat Limited** in addition to generic ToR given at Annexure –II for underground mines for preparation of EIA/EMP report for Pathora West Coal Block (Sohagpur Coalfield) (area 554.0843 Ha having capacity 0.8 MTPA) by M/s Shri Bajrang Power and Ispat Limited located at Villages: Gitori, Ghunghuti, Patnarkala; District: Umaria; State: Madhya Pradesh.

Specific ToRs:

- i. Project proponent has to prepare the EIA-EMP report based on the valid baseline data and thereafter conduct the Public Consultation (including public hearing), through concerned SPCB in the concerned Districts as per the provisions/procedure contained in the EIA Notification, 2006 (as amended)and OM issued by the MoEF&CC in this regard.
- ii. Project Proponent shall submit the detailed activities proposed with year-wise budgetary provisions (Capital and recurring) as per the Ministry's OM dated 30.09.2020, to address the concerns raised during the Public consultation including the public hearing. Activities proposed shall be part of the EMP.
- iii. Project proponent shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
- iv. Project proponent has to Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
- v. Impact of underground mining on the environment including underground mine air quality needs to be done by a reputed Government institute. The action plan on recommendation of study with budgetary provision needs to be submitted.
- vi. PP has to submit two (02) alternate locations of mine incline and present the environmental details of such sites at time of EC appraisal.
- vii. Mine seepage will be monitored and seepage water control measures/management plan shall be developed to ensure the safety of the workers during the underground mining.
- viii. Assess the temporal and spatial data for 10 years for surrounding area to show and identify the changes in land use/land cover.
- ix. As the project involves groundwater intersection a Hydrological study shall be carried out by reputed Government Institute. Further, PP shall comply with the Ministry's OM dated 23.05.2019 and provide necessary details/studies in the EIA/EMP Report.
- x. Project proponent shall submit the drone video & photographs of mined area, fresh lease area to be mined and existing and proposed transportation route. The height and speed of the drone shall be so maintained to give legible images/videos. Necessary titles should be included for better understanding.
- xi. Project proponent should submit the detailed plan in tabular format (year-wise for life of mine) for concurrent afforestation and green belt development in three tiers by using the native species in and around the mining lease. The PP should submit the number of saplings to be planted, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. In addition to this PP should show on a surface plan (5-year interval for life of mine) of suitable scale the area to be covered under afforestation & green belt clearly mentioning the latitude and longitude of the area to be covered during each 5 years. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling of height not less than 2 meters to be selected and accordingly

- cost of plantation needs to be decided.
- xii. Project proponent should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- xiii. Pond rejuvenation plan and plan for water recharge within and outside ML/surrounding area needs to be prepared. The capital and recurring expenditure to be incurred needs to be submitted.
- xiv. PP has to avoid the use of forest land towards North-east (NE) and South-west (SW) part of the mining lease (ML) area.
- xv. Project proponent should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged under Environment Management Cell for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- xvi. Project proponent should clearly bring out that what is the specific diesel consumption ~ (Litres/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility and submit strategy of using e-vehicles/cleaner fuel (LNG/CNG) based mining machinery and trucks for mining operations and transportation of men and material and submit a time bound action plan.
- xvii. Project proponent should clearly show the transport route of the mineral and protection and mitigative measures to be adopted while transporting of the mineral. The impact from the centre line of the road/conveyor on either side should be brought out clearly. Based on the above study the compensation to be paid in the event of damage to the crop and land on either side of the road/conveyor needs to be mentioned.
- xviii. All the certificates viz. Involvement of Forest land, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
- xix. Analyse terrestrial/aquatic biodiversity and wildlife studies of the surrounding area and prepare wildlife management plan for the surrounding area. PP has to submit a Certificate from concerned DFO about existence of wildlife corridor adjacent to project site with adequate management plan.
- xx. A detailed Wild Life Conservation/Management plan for Schedule 1 species shall be prepared for the conservation of the species. PP shall ensure that a conservation plan shall be prepared and approved by the CWLW. PP shall obtain the authenticated list of schedule-1 species from the concerned department.
- xxi. Project proponent shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
- xxii. Project proponent shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of the Environment Management Plan vis-à-vis reduction in

- concentration of emission for each APCEs.
- xxiii. It should be ensured that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
- xxiv. Project proponent shall submit the photographs of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyse the samples.
- xxv. A Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
- xxvi. Details of solar power facility proposed to be installed as energy conservation measures shall be submitted.
- xxvii. Project proponent shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero emission by 2050. PP shall update the same to the EAC.
- xxviii. Project proponent should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
 - xxix. Project proponent shall submit the applications for obtaining NOC for the diversion of Road/River/Nallah/Electric lines, if any, passing through the block area to the concerned authority and details shall be provided in EIA Report. No diversion of River/nalah permitted at this stage.
 - xxx. Project proponent shall also submit an action plan pursuant to MoEF&CC OM dated 29.10.2014.
- xxxi. Project proponent shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget. The EIA report should also include details of STP/ETP to be provided for treatment of domestic and industrial waste water.
- xxxii. Heavy metals including other parameters in surface water quality shall be analysed and provided in EIA Report.
- xxxiii. Project proponent shall assess the environmental impact on schools present inside/surrounding areas and explore possibility for their maximum protection or relocation. A mitigation measures shall be adopted against pollutions around the schools within the lease area in order to safeguard the interest and health of the students. A plan in this regard needs to be submitted.
- xxxiv. Project proponent shall provide the action plan for the safety of the local people and their cattle from the mining activities by providing fencing and natural wind barrier between the mine infrastructure and settlements etc. shall be a part of such action plan. PP shall ensure to provide right of way to local people and EMP should have provision for the same.
- xxxv. Project proponent shall submit time bound action plan to reduce the post-mining void and submit the rejuvenation plan for the ponds within/surrounding the lease area so that it can be used by local people.

- xxxvi. Project proponent shall submit a plan to reduce the overburden (OB) generated during underground mining of coal and its deposition outside mining lease (ML) area.
- xxxvii. Project proponent shall provide the details of the bore wells in the mine lease area and compensation to be paid in case bore wells fails in future due to mining activities.
- xxxviii. Project proponent shall provide the details of the facilities to be provided to mine workers.
 - xxxix. Project proponent shall submit a plan for skill development of the Project affected family (PAF) and nearby community so that they are capable enough to get employment/self-employed.
 - xl. Project proponent shall explore use of porta- magazine for explosives, if any.
 - xli. Project proponent shall prepare disaster management plan considering the risk involved in the proposed underground mining.
 - xlii. Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5thJune 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

Agenda No. 15.8

15.8: Gondkhari Underground Coal Mine (Kamptee Coalfield) (area 862 Ha having targeted capacity 2 MTPA) by M/s Adani Power Maharashtra Limited located at Villages: Waddhamana, Gondkhari, Pendhari, Kalameshwar, Nagpur (rural); District: Nagpur; State: Maharashtra – Amendment in EC –reg.

[Online Proposal No. IA/MH/CMIN/495430/2024; File No. J-11011/46/2022-IA.II(M)] [Consultant: Vardan Environet LLP NABET/EIA/2326/RA0284 valid up to 04/05/2026]

15.8.1: The instant proposal is for amendment in Environment Clearance granted to M/s Adani Power Maharashtra Limited vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 for Gondkhari Underground Coal Mine (area 862 Ha having targeted capacity 2 MTPA) regarding change in infrastructure location within mine lease area, mainly mine entries through inclines and ventilation shaft.

Details of all the prior ECs including the EC for which amendment is sought are summarized as below:

| Sl. No. | Details of Letter No | EC/Expansion EC/Amendment in EC/Validity extension/Transfer of EC | Capacity (MTPA) | Area (Ha) | Date of Issuance | Status of Implementation |
|------------|--------------------------------------|---|-----------------------------|--------------|---------------------|--|
| 1. | IA-J- 11011/46/20 22-IA. II(M) | Environmental Clearance | 2/3 (Normative/ Peak) | 862 | 02.02.2024 | Project activity is yet to commence at the site. |

Details of proposal, as ascertained from the documents and as revealed from the discussion held during the meeting, are given as under:

15.8.2: The PP has made an online application vide proposal no. IA/MH/CMIN/495430/2024 dated 05.09.2024 for amendment in "EC Miscellaneous Condition no. 9.9" and "EC particulars s. no. 2 (iii) – Clearance type" accorded vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024.

| Specific/General Condition no. | Details of Conditions as per EC | Amendment Sought | Justification |
|-----------------------------------|--|---|--|
| 9. Miscellaneous | 9.9 – No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC). | Change in infrastructure location within mine lease area, mainly mine entries through inclines and ventilation shaft. | Change in location of land: Air return shaft land was shifted from Khasra No. 236 private land to Khasra No. 274 private land due to issues in land availability. Incline land was shifted from Khasra No. 104, 106, 109 & 110 private land to Khasra No. 96 due to flatten the incline gradient and issues in land availability. The location of the Incline mouth and associated infrastructure is proposed to be shifted with a view to make the gradient of the Incline milder/flatter (from 12° to 8°) for deploying tyre mounted trackless equipment for men/material transport. The location of the ventilation shaft has also been changed slightly accordingly. However, there are no other changes in UG layout of any seam. The above modification will enable the deployment of safer and advanced mode of men/material transport system with FSVs/ Men transport in the mine. Due to the aforementioned changes the proposed area. |
| | | | changes, the proposed area earmarked for infrastructure use is changed from 18.00 |

| Specific/General Condition no. | Details of Conditions as per EC | Amendment Sought | Justification | | |
|--|--|---------------------|---|--|--|
| | | | Ha to 21.31 Ha. It is noteworthy to mention here that the increased acreage shall however be used for greenbelt | | |
| EC Particulars 2. The particulars of the proposal are as below: | (iii) Clearance Type: Mining EC Under 5 Ha | | development only. Mine lease area is 862 ha, which is more than 5 ha. | | |

Salient features of the proposed amendment:

15.8.3: A. PP sought following amendment in the EC:

| Details | As per EC dated 02.02.2024 | Amendment Sought | Remarks | View of EAC of MoEF&CC |
|--|--|--|---------|---|
| Shift of Air Return Shaft Shift of Incline Land due to technical requirement of flatter gradient incline. | Falls in Khasra No. 236 (private land) Falls in Khasra No. 104, 106, 109 & 110 (private land) | Will be shifted to Khasra No. 274 (private land) due to issues in land availability. Will be shifted to Khasra No. 96 (private land) due to flatten the incline gradient and issues in land availability. | | Considering the letter received from Ministry of Coal, with respect to change in infrastructure location for mine entries through incline and air return shaft as mentioned by PP in the proposal submitted shall only be allowed. For any other expansion or modification, PP shall take prior approval of Ministry of Environment, Forest and Climate Change (MoEF&CC). |

| Details | As per EC dated 02.02.2024 | Amendment Sought | Remarks | View of EAC of MoEF&CC |
|---------|----------------------------------|---------------------|---|---------------------------|
| | | .KYC | been changed slightly accordingly. However, there are no other changes in UG layout of any seam. This modification will enable the deployment of safer and advanced mode of men/material transport system with FSVs/ Men transport in the mine. | |
| KYza | | P. I | View of Ministry of Coal on the above changes: Ministry of Coal vide letter no. CCO- | |
| C | O _{MO} | Tourne Protects | MPMC01(110)/1/2024- MPMC dated 06.08.2024, has mentioned that the "Mine entries are part of mine infrastructure and the same is evident from Coal Mines (Special | |
| | ³ nce | e-Payı | Provisions) Act, 2015, where compensation is payable to mine entries under infrastructure. So, the changes proposed in the location of mine entries will come under | |
| | | | the provisions of "minor changes" under para 1.3B of the OM dated 29.05.2020 of Ministry of Coal regarding Mining Plan and Mine Closure | |

MoM of 15th meeting of the EAC for Coal Mining sector held on 18-19th September, 2024

| Details | As per EC dated 02.02.2024 | Amendment Sought | Remarks | View of EAC of MoEF&CC |
|---------|----------------------------------|---------------------|---|---------------------------|
| KVA | | RYC I | Guidelines. Also, the related necessary changes in the mine layout and sequence of mining may be taken as "minor changes" and may be allowed without any modification of Mining Plan. Accordingly, it was confirmed that the shaft and incline are integral parts of the mine infrastructure and their relocation falls within the minor changes category as per the guidelines." | DSS |

Due to the shift of Air Return Shaft and inclined mouth, the land use changes during mining and post closure is furnished as below:

| | As per Approved Mine Plan | | | | Changes envisaged in the approved mining plan | | | | |
|-----------------------------------|---------------------------|-----------------------------|-----------------|-------|---|-----------------------|-----------------------------|-----------------|------------|
| Туре | Land use (proposed | Land use (end of mine life) | Agricultur e | Total | Туре | Land use (proposed | Land use (end of mine life) | Agricultur e | Total |
| Road & Infrastructur e Area | 13.845 | 13.84 | 13.845 | 13.84 | Road & Infrastructur e Area | 13.845 | 13.84 | 13.845 | 13.84 5 |
| Settling Pond | 0.08 | 0.08 | 0.08 | 0.08 | Settling Pond | 0.08 | 0.08 | 0.08 | 0.08 |
| Embankmen t | 0.075 | 0.075 | 0.075 | 0.075 | Embankmen t | 0.075 | 0.075 | 0.075 | 0.075 |
| Green Belt | 2.0 | 2.0 | 2.0 | 2.0 | Green Belt | 5.3 | 5.3 | 5.3 | 5.3 |
| UG Entry | 2.0 | 2.0 | 2.0 | 2.0 | UG Entry | 2.0 | 2.0 | 2.0 | 2.0 |
| Undisturbed/ Mining Right for UG | 844 | 844 | | 844 | Undisturbed/ Mining Right for UG | 840.7 | 840.7 | | 840.7 |
| Grand Total | 862 | 862 | 18.0 | 862 | Grand Total | 862 | 862 | 21.3 | 862 |

15.8.4 B. PP sought the following corrigendum in the EC letter dated 02.02.2024:

| Para No | As per EC dated 02/02/2024 | Amendment Sought |
|---------|---|---|
| 2 | The particulars of the proposal are as below: | Mine lease area is 862 ha, which is more than 5 ha. |
| | (iii) Clearance Type: Mining EC Under 5 Ha | (iii) Clearance Type: Fresh EC |

15.8.5: Details of court cases:

| Case No. | Court | Brief | Next date of hearing |
|-------------------|-------------|----------------------------------|----------------------|
| APPEAL NO. 145 OF | NGT | EC on which amendment is | 16.10.2024 |
| 2024 (WZ) | (Western | being sought has been challenged | |
| | Zone Bench, | before Hon'ble NGT (WZ), Pune | |
| | Pune) | on the grounds to quash and set | |
| | | aside the environmental public | |
| | | hearing held on 13/07/2023 by | |
| | 97 | MPCB. | |
| | | | |
| | / = | | 5 5 |

Observations and deliberation of the Committee:

15.8.6: The EAC noted the following:

- i. MoEF&CC has granted EC for Gondkhari Underground Coal Mine of M/s Adani Power Maharashtra Limited vide letter no. IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 for targeted capacity of 2 MTPA and peak capacity of 3 MTPA in an area of 862 Ha.
- ii. It is observed that the said project involves 87.351 Ha of forestland and the Stage I FC has been accorded on the same on 02.01.2024.
- iii. The above mentioned project is yet to be implemented.
- iv. Miscellaneous Condition no. 9.9 of EC stipulated that, "No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)."

Now, the PP has submitted the proposal to seek amendment in this particular condition to amend the same and allow the PP to "change the infrastructure location within mine lease area, mainly mine entries through inclines and ventilation shaft." Justification provided for the same by the PP is that due to issues in land availability, air return shaft and incline had to be shifted and there was also a technical requirement of a flatter gradient incline to be developed for safe working.

PP further submitted that changes in acreage are also proposed. Area for infrastructure was earlier proposed to be 18 Ha, which is now being increased by 3.31 Ha, i.e. total area proposed for acreage will be 21.31 Ha. PP also submitted that the increased area proposed will be used for greenbelt development only.

- v. The Committee observed that the said proposal was earlier deliberated in 13th EAC held on 1st-2nd July 2024, where along with the board approval letter dated 11.04.2024, PP submitted that the modifications in the mine plan proposed to be made are of minor nature (as per clause 1.3 (B) of OM dated 29.05.2020 of MOC) and the same need not to be approved from MOC. The Member Secretary confirmed the same from MOC and it was informed that it does not falls under the purview of minor changes as per the guidelines of MOC. Hence, the proposal was returned in the present form.
- vi. Now the PP has again submitted the proposal for amendment along with the letter of MOC, dated 06.08.2024, wherein it is submitted that a meeting was held at MOC on 29.07.2024 under the chairmanship of Additional Secretary and Nominated Authority, regarding this particular issue for the said project. The MOC in this letter has mentioned that the "Mine entries are part of mine infrastructure and the same is evident from Coal Mines (Special Provisions) Act, 2015, where compensation is payable to mine entries under infrastructure. So, the changes proposed in the location of mine entries will come under the provisions of "minor changes" under para 1.3B of the OM dated 29.05.2020 of Ministry of Coal regarding Mining Plan and Mine Closure Guidelines. Also, the related necessary changes in the mine layout and sequence of mining may be taken as "minor changes" and may be allowed without any modification of Mining Plan. Accordingly, it was confirmed that the shaft and incline are integral parts of the mine infrastructure and their relocation falls within the minor changes category as per the guidelines."

The Committee deliberated on the same and observed MOC has conducted a separate meeting under the chairmanship of Additional Secretary and Nominated Authority, in order to give clarification instant matter under consideration and has issued a specific report for the same stating that such changes may be taken as minor changes and may be allowed without modification of Mining Plan.

- vii. The Committee further deliberated on the impact of making such changes on the environment. In this regard, PP informed that that there is less than 50 m difference in the distance between old land and the newly proposed land and no such impact will be there on the environment for making such changes. The Committee also observed that the area increased for infrastructure (i.e., 3.31 Ha) will be used for greenbelt development.
- viii. The Committee also observed that, the proposed shift being made for air return shaft and incline land is from private land to private land only with a view to make the gradient of the Incline milder/flatter (from 12° to 8°). This modification will enable the deployment of safer and advanced mode of men/material transport system with FSVs/ Men transport in the mine.

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- ix. Apart from this, another amendment sought by the PP is rectification in the EC Particulars, S. no. (iii) Clearance Type, which is mentioned as "Mining EC under 5 Ha" instead of "Fresh EC". The Committee observed that some part of the EC letter are system generated and due to technical error it is wrongly mentioned as Mining EC under 5 Ha". This should be as "Fresh EC" rather.
- x. The Committee also deliberated on the litigations pertaining to the said project and observed that the EC on which amendment is sought has been challenged at the NGT Pune and the case has been registered as *Brijkishore Hargovind Agarwal vs UOI* on 24.07.2024 as Appeal No. 145/2024. The said EC has been challenged before Hon'ble NGT (WZ), Pune on the grounds to quash and set aside the environmental public hearing held on 13/07/2023 by MPCB.PP is advised to abide by the Order of Hon'ble NGT.

Recommendations of the Committee:

15.8.7: After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. - IA-J-11011/46/2022-IA. II(M), dated 02.02.2024 with respect to Change in infrastructure location for mine entries through incline and air return shaft as mentioned at paragraph no. 15.8.3 subject to stipulation of following additional specific condition. Other terms and conditions prescribed in EC dated 02/02/2024 shall remain unchanged.

- i. The project proponent shall abide by all orders and judicial pronouncements, made from time to time by the Hon'ble National Green Tribunal (NGT), Western Zone, Pune in Appeal No. 145 of 2024.
- Additional Green belt shall be developed by the project proponent in an area of 5.51 Ha around the periphery of Infrastructure area as committed in accordance with the CPCB guidelines and in consultation with Local Forest Department. Compliance status in this regard shall be submitted to the concerned Regional Office of the Ministry along with the six monthly compliance report.

In addition to the above, the Committee also recommended corrigendum in the EC dated 02/02/2024 as given below:

| Para No | As per EC dated 02/02/2024 | Amendment Sought |
|---------|------------------------------|-----------------------|
| 2 | (iii) Clearance Type: Mining | (iii) Clearance Type: |
| | EC Under 5 Ha | Fresh EC |

Additional agenda with the permission of the Chair

15.9 Utkal-E Coal Block (2 Million TPA over 729.48 Ha) of M/s. National Aluminium Company Limited (NALCO) located in Talcher Coalfields, in villages Nandichhod (Gopiballypur), Gopinath

Jungle, Kosala, Korada, Kundajhari Jungle, and Durgapur Jungle, Tehsil Chhendipeda, District Angul, Odisha – **Transfer of Environmental Clearance – reg.**

[Online Proposal No. IA/OR/CMIN/495414/2024; File No. IA-J-11015/31/2007-IA-II-(M) Consultant: JM EnviroNet Pvt. Ltd - NABET/EIA/23-26/RA 0308; Valid till 07th August, 2026]

15.9.1 M/s. National Aluminium Company Limited (NALCO) has made an online application vide proposal No: IA/OR/CMIN/495414/2024 dated 12/09/2024 along with Form 7, Common Application Form (CAF) & allotment order of Ministry of Coal and sought for transfer of Environment Clearance (EC) dated 10/12/2009 for the project cited above under the provisions of EIA Notification, 2006.

15.9.2 Brief on the EC transfer proposal

- i. MoEF&CC accorded Environment Clearance to M/s. National Aluminium Company Limited (NALCO) under the provisions of EIA Notification, 2006 for their Utkal-E Coal Block (2 Million TPA over 729.48 Ha) located in Talcher Coalfields, in villages Nandichhod (Gopiballypur), Gopinath Jungle, Kosala, Korada, Kundajhari Jungle, and Durgapur Jungle, Tehsil Chhendipeda, District Angul, Odisha vide letter no. IA-J-11015/31/2007-IA-II-(M) dated 10/12/2007. Subsequently, MoEF&CC issued corrigendum to M/s. NALCO on 26/12/2013 stating that date of grant of EC shall be read as 10/12/2009 instead of 10/12/2007. As per the EC dated 10/12/2009, the project involves 729.48 Ha of total land, wherein 526.06 Ha covered in Mine lease area and 203.42 Ha outside the mine lease area, which is earmarked for infrastructure. In entire project area, total 228.14 Ha (171.51 Ha + 56.63 Ha) of forest land involved. The forest land involvement within the lease area and outside lease are reported to be 171.51 Ha and 56.63 Ha respectively. Further, as per the said EC, the life of mine at the rate capacity of 2 MTPA is 36 years and mining plan was approved by Ministry of Coal on 31/07/2006. Public hearing was held on 30/05/2008.
- ii. The Hon'ble Supreme Court vide its judgement dated 25/08/2014 read with the order dated 24/09/2014 in P (CRL) No 120/2012 has cancelled the allocation of 204 coal blocks and issued directions with regard to allocation of such coal blocks. Further, as per Ministry of Coal notification The Coal Mines (Special Provisions) Ordinance 2014, the above coal block got cancelled. Thereafter, Ministry of Coal vide allotment order dated 02/05/2016 allotted the Utkal-E Coal Block to NALCO under Coal Mines (Special Provisions) Act, 2015. Mine lease deed was signed between NALCO and Government of Odisha on 20/01/2023. As per the said mine lease deed, the lease area was reduced to 523.036 Ha from 729.48 Ha. Further, the area of 203.42 Ha outside ML Area for infrastructure was not re-allocated to NALCO by the State Government.
- iii. MoEF&CC vide notification dated 23/03/2015 amended the EIA Notification, 2006 stating that "Where an allocation of coal block is cancelled in any legal proceeding; or by the Government in accordance with law, the environmental clearance granted in respect of such coal block may be transferred, subject to the same validity period as was initially granted, to any legal person to whom such block is subsequently allocated, and in such case, obtaining of "no objection" from either the holder of environment clearance or from the regulatory

authority concerned shall not be necessary and no reference shall be made to the Expert Appraisal committee or the State Level Expert Appraisal Committee concerned."

- iv. The Member Secretary Coal apprised the EAC that Coal mining EC transfer proposals involving forest areas where forest land is proposed to be surrendered and stage I FC is yet to be obtained shall be referred to the sectoral EAC for consideration on case to case basis based on merits involved as per the minutes of the meeting held on 03/09/2019 between Secretary, Coal and Secretary, EF&CC.
- v. In pursuance to the above, M/s. NALCO submitted a proposal for transfer of EC dated 10/12/2009. The said proposal was considered by the EAC Coal in its 44th meeting held on 09/05/2023 wherein EAC opined that PP needs to submit the followings:
 - (i) Stage-I FC of remaining forest land i.e 15.3321 Ha involved in mine lease area to be diverted for non-forestry activities or
 - (ii) Submit Revise Mine plan with Map excluding the area for which Stage-I FC has not been granted.

The Committee finally recommended to MoEF&CC to opt either of above options. Finding no other alternative in the matter, finally the project proponent informed the committee that the application for transfer of EC for Utkal-E project will be withdrawn by them due to involvement of pending FC for forest area of 15.3321 ha, which will take considerable time. PP vide letter dated 17.05.2023 requested MoEF&CC for withdrawal of current application of EC transfer. Based on request of PP, EAC finally recommended MoEF&CC that instant application may be returned. Accordingly, the proposal was returned in present form.

vi. NALCO filed fresh application vide proposal No: IA/OR/CMIN/495414/2024 dated 12/09/2024 along with Form 7, Common Application Form (CAF) & allotment order of Ministry of Coal and sought for transfer of Environment Clearance (EC) dated 10/12/2009 for the project cited above under the provisions of EIA Notification, 2006 along with Stage I FC.

15.9.3 Brief on the present transfer proposal

i. Implementation status of the EC dated 10/12/2009

| Production capacity | Life of mine | Consent to Establish | Consent to Operate | Present status of the project |
|---------------------|--------------|-------------------------|--|--|
| 2 MTPA | 36 years | 13/08/2021 | 31/08/2024 and is valid up to 31/03/2025 | Not yet commenced the mining activity. |

ii. Details EC accorded on 10/12/2009 vis-à-vis transfer proposal

| | | As per EC dated 10/12/2009 | | | As per present transfer proposal | | |
|-------|-------------|----------------------------|-----------------|---------------|----------------------------------|-----------------|---------------|
| S.No. | Particulars | Within Mine | Outside Mine | Total (Ha) | Within Mine lease (Ha) | Outside Mine | Total (Ha) |

| | | lease (Ha) | lease (Ha) | | | lease (Ha) | |
|----|----------------------|------------|------------|--------|----------|---------------|----------|
| a. | Coal Mining | 2 MTPA | | 2 MTPA | | | |
| b. | Land Area | 526.06 | 203.42 | 729.48 | 353.8578 | 0 | 353.8578 |
| c. | Forest land involved | 171.51* | 56.63 | 228.14 | 169.1779 | 0 | 169.1779 |

Note: *171.51 Ha – Out of 171.51 Ha, 2.33 Ha of land was under Durgapur Reserved Forest. NALCO applied to State Govt regarding deletion of 2.33 ha Durgapur Reserved Forest land (to be used as forest road to evacuate the coal from adjacent Utkal D Block). The same was approved by MoC, GOI. Within the above, the forest land was revised to 169.18 ha.

Status of Forest Clearance for diversion of 169.1779 Ha under Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

- a. Stage II Forest clearance for diversion of an area of 169.1779 ha area in favor of M/s. NALCO was obtained from MoEF&CC (Forest Conservation Division) vide letter No 8-07/2020-FC dated 27/10/2022. Subsequently, corrigendum in FC was issued on 09/11/2022 by mentioning the diverted land area as 156.1779 ha instead of 169.1779 ha.
- b. Stage I Forest clearance over an area of 13 ha in favor of M/s. National Aluminum Company Limited was obtained from MoEF&CC (Forest Conservation Division) vide letter No FP/OR/MIN/QRY/456337/2023 dated 20/08/2024.
- iii. Project proponent has requested the Ministry to transfer the EC dated 10/12/2009 for the reduced area of 523.036 Ha in place of 729.48 Ha subject to the same validity period as was initially granted on 10/12/2009.
- iv. PP informed that adjacent to Utkal E coal block there is Utkal D coal block of NALCO. Utkal-D Coal block was allocated to NALCO on 02.05.2016 by the Ministry of Coal (MoC), GOI as per Coal Mines (Special Provision) Act, 2015. Earlier EC was granted for the 2.0 million TPA production in favour of M/s. Orissa Mining Corporation Ltd. After grant of lease in favor M/s. NALCO, EC was also transferred from M/s. Odisha Mining Corporation Ltd to M/s. NALCO. It has been decided to combine Utkal – D and Utkal E Coal Mines for conserving of about 20 million tonnes of Coal getting locked up in the common barrier. Grant order for Mining Lease for Utkal D & E Combined has been issued by the State Govt vide letter dated 18.11.2023 over an area of 824.316 ha for the lease period up to 24.03.2051. Mining Plan and Mine Closure Plan for Combined Utkal D and Utkal E coal mines has been approved by Ministry of Coal on 10.05.2024. In view of this, M/s. NALCO will be applying for amalgamation in EC seeking single EC letter for Utkal D and E coal Block admeasuring combined area of Utkal D and Utkal E coal mines 824.316 ha with targeted Coal production capacity of 4.0 million TPA at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Raijharan, Similisahi, Tehsil: Chhendipada District: Angul, Odisha. After the EC transfer of Utkal E coal block, the application for amalgamation in ECs will be submitted.

15.9.4 Observations and deliberations of the Committee

The Committee noted the following:

- i. Proposal is for transfer of EC dated 10/12/2009 in the name of NALCO for the reduced area of 523.036 Ha in place of 729.48 Ha.
- ii. In the instant case, an area of 203.42 ha outside the lease area and
- iii. Instant proposal has been referred to EAC by the Ministry in accordance with the minutes of the meeting held on 03/09/2019 between Secretary, Coal and Secretary, EF&CC.
- iv. Consequent upon the aforementioned transfer of EC, the project proponent will be submitting separate application for Utkal D and E coal Block admeasuring combined area of Utkal D and Utkal E coal mines 824.316 ha with targeted Coal production capacity of 4.0 million TPA at Village: Nandichhod (Gopiballavpur), Gopinathpur Jungle, Kosala, Kundajhari Jungle, Korada, Raijharan, Similisahi, Tehsil: Chhendipada District: Angul, Odisha.
- v. Mining Plan and Mine Closure Plan for Combined Utkal D and Utkal E coal mines has already been approved from Ministry of Coal on 10.05.2024.

15.9.5 Recommendations of the Committee

In view of the foregoing and after deliberations the Committee recommended for the transfer of EC dated 10/12/2009 in the name of M/s. National Aluminium Company Limited (NALCO) for a production capacity of 2 MTPA in the ML area of 523.036 Ha subject to the following conditions in addition to the terms and conditions prescribed in the EC letter dated 10/12/2009.

- i. The safety distance of at least 15 m shall be maintained all along the forest boundary.
- ii. The project proponent shall develop green belt all along the mine boundary with broad leaved, native tree species.
- iii. Controlled blasting techniques using NONEL and down the hole initiation shall be adopted while working near the forest boundary and habitations.
- vi. The project proponent shall abide by all the terms and conditions as per the Mining Plan and Mine Closure Plan approved by the Ministry of Coal on 10.05.2024.
- 15.10 Expansion of Bhubaneswari OCP for increase in Mine lease area from 638.341 Ha to 658.724 Ha [638.341ha+20.383ha (forest area)] keeping existing production capacity 30 MTPA by M/s Mahanadi Coalfields Ltd. located in the villagesJilinda, Hensmul (Sharasahi), Hensmul (Talasahi), Naraharipur, Khandualbhal, Kandhal, Madanmohanpur, Langijoda and Anadipur, Tehsil Talcher Sadar, District Angul (Odisha)— **Deliberations by the EAC reg.**

Site visit was conducted by the sub-committee of EAC during 7/7/2024 to 10/07/2024 for the project mentioned above. The site visit report of the sub-committee (enclosed as **Annexure V of MoM)** was deliberated by the EAC. After deliberations, the Committee recommended that the report may be sent to the project proponent for incorporating the observations of sub-committee in the final EIA/EMP report to be submitted to the Ministry for appraisal of the project mentioned above.

ANNEXURE-I

Generic ToR for coal washery

- i. Siting of washery is critical considering to its environmental impacts. Preference should be given to the site located at pit head; in case such a site is not available, the site should be as close to the pit head as possible and coal should be transported from mine to the washer preferably through closed conveyer belt to avoid air pollution.
- ii. The washery shall not be located in eco-sensitive zones areas.
- iii. The washery should have a closed system and zero discharge. The storm drainage should be treated in settling ponds before discharging into rivers/streams/water bodies.
- iv. A thick Green belt of about 50 m width should be developed surrounding the washery.
- v. A brief description of the plant along with a layout, the specific technology used and the source of coal should be provided.
- vi. The EIA-EMP Repot should cover the impacts and management plan for the project of the capacity for which EC is sought and the impacts of specific activities, including the technology used and coal used, on the environment of the area (within 10km radius), and the environmental quality of air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts for the rated capacity. Cumulative impacts for air and water should be a part of EIA in case coal mine, TPP and other washeries are located within 10km radius. The EIA should also include mitigative measures needed to minimize adverse environmental impacts.
- vii. A Study Area Map of the core zone as well as the 10km area of buffer zone showing major industries/mines and other polluting sources should be submitted. These maps shall also indicate the migratory corridors of fauna, if any and areas of endangered fauna; plants of medicinal and economic importance; any ecologically sensitive areas within the 10 km buffer zone; the shortest distance from the National Park/WL Sanctuary Tiger Reserve, etc. along with the comments of the Chief Wildlife Warden of the State Govt.
- viii. Data of one-season (non-monsoon) primary- base-line data on environmental quality of air (PM10, PM2.5, SOx and NOx, noise, water (surface and groundwater), soil be submitted.
- ix. The wet washery should generally utilize mine water only. In case mine water is not available, the option of storage of rain water and its use should be examined. Use of surface water and ground water should be avoided.
- x. Detailed water balance should be provided. The break-up of water requirement as per different activities in the mining operations vis-a-vis washery should be given. If the source of water is from surface water and/or ground water, the same may be justified besides obtaining approval of the Competent Authority for its drawl.
- xi. The entire sequence of mineral production, transportation, handling, transfer and storage of

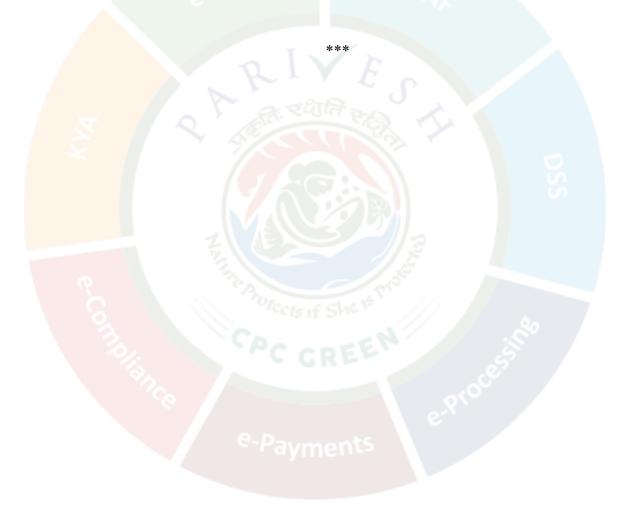
mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with specific points where fugitive emissions can arise and specific pollution control/mitigative measures proposed to be put in place. The washed coal and rejects should be transport by train as far as possible. Road transport of washed coal and rejects should generally be avoided. In case, the TPP is within 10km radius, it should be through conveyer belt. If transport by rail is not feasible because of the topography of the area, the option for transport by road be examined in detail and its impacts along with the mitigation measures should be clearly brought out in EIA/EMP report.

- xii. Details of various facilities proposed to be provided in terms of parking, rest areas, canteen etc. to the personnel involved in mineral transportation, workshop and effluents/pollution load from these activities should be provided.
- xiii. Impacts of CHP, if any, on air and water quality should also be spelt out along with Action Plan.
- xiv. O.M. No. J-ll0I3/25/2014-IA.I dated 11th August, 2014 to be followed with regard to CSR activities.
- xv. Details of Public Hearing, Notice(s) issued in newspapers, proceedings/minutes of Public Hearing, points raised by the general public and response/commitments made by the proponent along with the Action Plan and budgetary provisions be submitted in tabular form. If the Public Hearing is in the regional language, an authenticated English translation of the same should be provided. Status of any litigations/ court cases filed/pending, if any, against the project should be mentioned in EIA.
- xvi. Analysis of samples indicating the following be submitted: Characteristics of coal prior to washing (this includes grade of coal, other characteristics of ash, S and heavy levels of metals such as Hg, As, Pb, Cr etc). Characteristics and quantum of coal after washing. Characteristics and quantum of coal rejects.
- xvii. Details of management/disposal/use of coal rejects should be provided. The rejects should be used in TPP located close to the washery as far as possible. If TPP is within a reasonable distance (10 km), transportation should be by conveyor belt. If it is far away, the transportation should be by rail as far as possible.
- xviii. Copies of MOU/Agreement with linkages (for stand-alone washery) for the capacity for which EC is being sought should be submitted.

Corporate Environment Responsibility:

- a) The Company must have a well laiddown Environment Policy approved by the Board of Directors.
- b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/ violation of the environmental or forest norms/ conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.

- d) To have proper checks and balances, the company should 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.
- e) A detailed action Plan for Corporate Social Responsibility for the project affected people and people living in and around the project area should be provided.
- f) Permission of drawl of water shall be pre-requisite for consideration of EC.
- g) Wastewater /effluent should confirm to the effluent standards as prescribed under Environment (Protection) Act, 1986
- h) Details of washed coal, middling and rejects along with the MoU with the end-users should be submitted.



ANNEXURE-II

GENERIC TOR FOR AN OPEN CAST COAL MINE PROJECT

- (i) An EIA-EMP Report shall be prepared for MTPA rated capacity in an ML/project area of.....ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
- (ii) An EIA-EMP Report would be prepared for..... MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.
- (iii) A toposheet specifying locations of the State, District and Project site should be provided.
- (iv) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (v) Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area mayalso be provided with explanatory note on the land use.
- (vi) Map showing the core zone delineating the agricultural land (irrigated and unirrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (vii) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (viii) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channeling of

- the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (ix) In case of any proposed diversion of nallah/canal/river, the proposed route of diversion/modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and flood control Department of the concerned state.
- (x) Similarly, if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map along with the status of the approval of the competent authority.
- (xi) Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

LAND USE DETAILS FOR OPEN CAST PROJECT should be given as per the following table:

| | Sl. | Land use | Within MLarea | OutsideMLarea | Total |
|---|-----|--------------------|-----------------|---------------|-------|
| | No. | | (ha) | (ha) | |
| Ì | 1. | Agriculturalland | मं रधीत है। | 1 | |
| İ | 2. | Forestland | CALL | 37 1 | |
| | 3. | Wasteland | 4697 | | ý |
| | 4. | Grazingland | | , l |) |
| | 5. | Surfacewaterbodies | | // g | |
| | 6. | Settlements | | ĮĘ. | |
| | 7. | Others(specify) | 1004 C 5 Lac 15 | <u> </u> | |
| | 9 | TOTAL | | | ઐૂ |

- (xii) Break-up of lease/project area as per mining plan should be provided.
- (xiii) Impact of changes in the land use due to the project if the land is predominantly agricultural land/forest land/grazing land, should be provided.
- (xiv) One-season (other than monsoon) primary baseline data on environmental quality air (PM10, PM2.5, SO_X, NO_X and heavy metals such as Hg, Pb, Cr,As,etc), noise, water (surface and groundwater), soil along with one-seasonmet data coinciding with the same season for AAQ collection period should be provided.
- (xv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station

- should be in the upwind/upstream/non-impact/non- polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xvi) Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision submitted with EIA-EMP should prepared and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (xvii) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xviii) Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis- à-vis the potential impacts should be provided.
- (xix) Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (xx) Detailed water balance should be provided. The break-up of water requirement for the various mine operations should be given separately.
- (xxi) Source of water for use in mine, sanction of the Competent Authority in the State Govt..and impacts vis-à-vis the competing users in the upstream and downstream of the project site. should be given.
- (xxii) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining

trend of groundwater availability and/or if the area falls within dark/grey zone.

- (xxiii)Impact of blasting, noise and vibrations should be given.
- (xxiv)Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
- (xxv) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xxvi)Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxvii) Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 280 angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
- (xxviii) Efforts be made for maximizing progressive internal dumping of O.B., sequential mining, external dump on coal bearing area and later rehandling into the mine void. --to reduce land degradation.
- (xxix) Impact of change in land use due to mining operations and plan for restoration of the mined area to its original land use should be provided.
- (xxx) Progressive Green belt and ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEFCC given below) and selection of species (native) based on original survey/land-use should be given.

Table1:Stage-wise Land use and Reclamation Area (ha)

| S.N. | LanduseCategory | Present | 5th | 10 th | 20 th | 24 th Year(end |
|------|--|------------------------|------|------------------|------------------|---------------------------|
| | | (1 st Year) | Year | Year | Year | o fminelife)* |
| 1. | Backfilled Area Reclaimed with plantation) | | | | | |
| 2. | Excavated Area (not reclaimed)/void | | | | | |

| 3. | External OB dump | | | |
|----|----------------------------|--|------|--|
| | Reclaimed with plantation) | | | |
| 4. | Reclaimed Top soil dump | | | |
| 5. | Green Built Area | | | |
| 6. | Undisturbed area (brought | | | |
| | Under plantation) | | | |
| 7. | Roads (avenue plantation) | | | |
| 8. | Area around buildings and | | | |
| | Infrastructure | | `a ~ | |
| | TOTAL | | | |

^{*}As a representative example

Table2: Stage Wise Cumulative Plantation

| S.No. | YEAR* | Green Belt | External Dump | Backfilled Area | Others (Undisturbed Area/etc) | TOTAL |
|-------|---|---------------|---------------|--------------------|-------------------------------------|-------|
| 1. | 1 st year | /(- | AC | :- 11 | | S S |
| 2. | 3 rd year | | | | | |
| 3. | 5 th year | 3/ | | | | |
| 4. | 10 th year | 3.7 | | 1000 | | |
| 5. | 15 th year | | Pects of S | he 15 | 7/ | |
| 6. | 20 th year | N'C | | -=14 | .5 | 9 |
| 7. | 25 th year | | CGR | EF | - 5 | |
| 8. | 30 th year | | | | 010 | |
| 9. | 34 th year (end of minelife) | | Payme | nts | 6. | |
| 10. | 34- 37 th Year (Post- mining) | | | | | |

^{*}As a representative example

(xxxi) Conceptual Final Mine Closure Plan and post-mining land use and restoration of land/habitat to the pre- mining status should be provided.

A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisios. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.

Table3:Post-Mining Land use Pattern of ML/Project Area (ha)

| S.N. | Land useduring | LandUse(ha) | | | | |
|------|---------------------|-------------|-------|----------------|-------------|-------|
| | Mining | | | | | |
| | | Plantation | Water | Public Use | Undisturbed | TOTAL |
| | e-KYC | | Body | Car | | |
| 1. | External OB | | | | | |
| | Dump | T | | | | |
| 2. | Topsoil Dump | LA | E | 0 | | |
| 3. | Excavation | તાં રહાતિ | Ba | A | | |
| 4. | Roads | | 163 | | | |
| 5. | Built up area | | | \ | SQ | |
| 6. | Green Belt | A A | de | \ | S | |
| 7. | Undisturbed Area | | | j _e | | |
| 7 | TOTAL | | 000 | 9 | | |

- (xxxii) Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic waste water,mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be done.
- (xxxiii) Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
- (xxxiv) Risk Assessment and Disaster Preparedness and Management Plan should be provided.
- (xxxv) Integration of the Env. Management Plan with measures for minimizing use of natural resources-water, land, energy, etc. should be carried out.
- (xxxvi) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxxvii) Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population,

- site for the resettlement colony, alternate livelihood concerns/ employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxxviii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
- (xxxix) Corporate Environment Responsibility:
 - a. The Company must have a well-laid down Environment Policy approved by the Board of Directors.
 - b. The Environment Policy must prescribe for standard operating process/ procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.
 - c. The hierarchical system or Administrative Order of the company todeal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - d. To have proper checks and balances, the company should 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.
- (xl) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/ minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xli)Inbuilt mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- (xlii)Status of any litigations/court cases filed/pending on the project should b eprovided.
- (xliii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, Sand heavy metals including levels of Hg, As, Pb, Cr etc.
- (xliv)Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept.(if req.), etc. wherever applicable.
- FOREST CLEARANCE: Details on the Forest Clearance should be given as per the format given:

| TOTALML/P | TOTALFO | Date of FC | Extent of | Balance area | Status of |
|-----------|---------|---------------|-------------|--------------|--------------|
| ROJECTARE | RESTLAN | | forest land | for which FC | Appl for. |
| A(ha) | D(ha) | | | is yet to be | Diversion of |
| | | | | obtained | forestland |
| | | If more than, | | | |
| | | provide | | | |
| | | details of | | | |
| | | Each FC | | | |



ANNEXURE-III

GENERIC TORS FOR AN UNDER GROUND COAL MINE PROJECT

- (i) An EIA-EMP Report shall be prepared for MTPA rated capacity in an ML/project area ofha based on the generic structure specified in Appendix-III of the EIA Notification,2006.
- (ii) An EIA-EMP Report would be prepared for MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approved project/Mining Plan for MTPA.
- (iii) Baseline data collection can be for any season (three months) except monsoon.
- (iv) A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
- (v) Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
- (vi) A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
- (vii) A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
- (viii) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on

the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified.

| S. | ML/ProjectLandu | Areaunder | AreaUnder | AreaunderBo |
|----|------------------|--------------------|-------------------|-------------|
| N | se | Surface Rights(ha) | Mining Rights(ha) | th(ha) |
| 1. | Agriculturalland | | | |
| 2. | ForestLand | | | |
| 3. | GrazingLand | | | |
| 4. | Settlements | -KAC | C. | |
| 5. | Others(specify) | | 7.4% | |

Area under Surface Rights

| S.N. | Details | Area(ha) |
|------|--|----------|
| 1. | Buildings | |
| 2. | Infrastructure | |
| 3. | Roads | SS |
| 4. | Others(specify) | |
| | TOTAL | |
| 0 | in the state of th | |

- (ix) Study on the existing flora and fauna in the study area (10 km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.
- (x) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and section should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of

- mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
- (xi) Details of mining methods, technology, equipment to be used,etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
- (xii) Impact of mining on hydrology, modification of natural drainage, diversion and channelling of the existing rivers/water courses flowing though the ML and adjoining the lease/ project and the impact on the existing users and impacts of mining operations there on.
- (xiii) One-season (other than monsoon) primary base line data on environmental quality-air (PM10, PM2.5, SO_X, NO_X and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil along with one-season met data coinciding with the same season for AAQ collection period should be provided.
- (xiv) Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non- polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
- (xv) Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
- (xvi) Study on subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
- (xvii) Detailed water balance should be provided. The breakup of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
- (xviii)Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
- (xix) Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions

- should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
- (xx) Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
- (xxi) Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
- (xxii) The number and efficiency of mobile/static water sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
- (xxiii) Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
- (xxiv)Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
- (xxv) Greenbelt development should be undertaken particularly around the transport route and CHP. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
- (xxvi) Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
- (xxvii) Details of R&R. Detailed project specific R&R Plan with data on the existing socioeconomic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
- (xxviii) CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.

(xxix) Corporate Environment Responsibility:

a) The Company must have a well laid down Environment Policy approved bythe

Boardof Directors.

- b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should 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.
- (xxx) Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
- (xxxi) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
- (xxxii) Status of any litigations/ court cases filed/pending on the project should be provided.
- (xxxiii) Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
- (xxxiv) Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

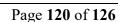
Details on the Forest Clearance should be given as per the format given:

| | | - 0 | | - 2 | |
|--------------------|--------------------|---|------------------|------------------------------------|------------------------------|
| Total ML | Total | Date of FC | Extent | Balance area | Status of appl. |
| /Project Area (ha) | Forest Land(ha) | e-Payme | ofForest Land | For which FC is yet to be obtained | For diversion of forest land |
| | | If more than one provide details of Each FC | | | |

ANNEXURE-IV

GENERIC TORS FOR AN OPENCAST-CUM UNDERGROUND COAL MINE PROJECT

- (i) An EIA-EMP Report would be prepared for a combined peak capacity of......MTPA for OC-cum-UG project which consists of....MTPA in an ML/project area of ha for OC and....MTPA for UG in an ML/project area of ha based on the generic structure specified in Appendix III of the EIA Notification 2006.
- (ii) An EIA-EMP Report would be prepared for MTPA rated capacity to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modelling for MTPA of coal production based on approved project/ Mining Plan for MTPA. Base line data collection can be for any season (three months) except monsoon.
- (iii) The ToRs prescribed for both open cast and underground mining are applicable for opencast—cum underground mining.



ANNEXURE-V

Expert Appraisal Sub-Committee visit report for -Expansion of Bhubaneswari OCP for increase in Mine lease area from 638.341 Ha to 658.724 Ha [638.341ha+20.383ha (forest area)] keeping existing production capacity 30 MTPA by M/s Mahanadi Coalfields Ltd. located in the villages Jilinda, Hensmul (Sharasahi), Hensmul (Talasahi), Naraharipur, Khandualbhal, Kandhal, Madanmohanpur, Langijoda and Anadipur, Tehsil Talcher Sadar, District Angul (Odisha)

As per MoEFCC office order Number J-11015/280/2013-IA-II(M) dt. 26/6/2024, a sub-committee was formed to visit the Bhubneshwari OCP for the on-the-spot assessment of the environmental issues. Accordingly, following committee members visited the site during 7/7/2024 to 10/7/2024. During the visit the representatives of PP and CMPDI were present.

- Shri Inder Pal Singh Matharu- Chairman
- Dr S Chandrashekhar- Member
- Shri U J Kahalekar-Member
- 4. Mr. Sandeep Nandi-Scientist B, Regional Office, Bhubneshwar, MoEFCC

The committee submits the report as below:

- 1. The proposal is for Terms of Reference for expansion of Bhubaneswari OCP for increase in Mine lease area from 638.341 Ha to 658.724 Ha [638.341ha+20.383ha (forest area)] with existing production capacity 30 MTPA by M/s Mahanadi Coalfields Ltd. The proposal was considered in its fifth meeting held on 21 and 22 December 2023 and 12 to 14 February 2024. EAC after detailed deliberations on the proposal recommended the proposal for grant of ToR with additional TOR and Standard ToR.
- The chronology for EC granted is as below.

| Sl. No. | Capacity | ML area in Ha | Date of EC | Remarks | | |
|-------------------|----------------|------------------------|----------------|---|--|--|
| 1. EC of 10.0 Mty | | EC of 10.0 Mty 658.724 | | EIA notification, 1994 | | |
| 2. | EC of 20.0 Mty | 658.724 | 30-11- 2012 | EIA notification, 2006 | | |
| 3. | EC of 25.0 Mty | 638.341 | 19-02- 2014 | Under 7 (ii) clause of EIA notification, 2006 (25% increment under special dispensation) | | |

| 4. | EC of 28.0 Mty | 638.341 | 16-02- 2018 | Under 7 (ii) clause of EIA notification, 2006 (40% increment under special dispensation) |
|----|----------------|---------|---------------------------------|--|
| 5. | EC of 28.0 Mty | 638.341 | 02-05- 2022 | Amendment in EC |
| 6. | EC of 30.0 Mty | 638.341 | 25-07- 2022 & 10-11-23 | EC under OM vide no.F.No.IA3-22/10/2022- IA.III, dated 07.05.2022 (50% increment under special dispensation) |

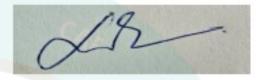
- 3. Out of 638.341 Ha area, 112.521 Ha is the forest area for which stage II FC has already been granted by forest department vide letter 8-18/2002/89-FC, Dt-06.12.2004. Application for additional forest land of 20.383 Ha for the proposed expansion has been uploaded by PP vide proposal no. FP/OR/MIN/155017/2022 on 30.04.2022. The proposal is yet to be sanctioned.
- 4. The presentation was given by PP regarding compliance of earlier EC conditions and conditions of ToR. Following points are observed, which need clarifications and compliance.
 - a) Out of proposed ML area of 658.724 Ha, the proposed unfilled void area is 266.013 Ha. The proposed void area seems to be much large. The studies shall be carried out regarding reduction in void area.
 - b) The sub-committee showed dissatisfaction about progress of plantation. It is reported that the remaining life of mine is only of 4 years. It observes that the progress of mine closure plan is not satisfactory and there is much poor plantation. The immediate response is very much needed about this. The appropriate budget provision for the same shall be made in EMP.
 - c) The total area covered by 3 tier green belt shall not be less than 100 Ha. It is reported that 25.08Ha Green belt outside ML was developed through Odisha Forest Development Corporation & Biological reclamation on 45Ha of internal dump comprising native species has been done. Further, 3 tier green belt comprising mix of native species shall be developed along the major approach roads.
 - d) The details of 638.341 Ha ML area such as, area in which mining is completed, balance area in which mining is being carried out and to be carried out, backfilled area, area in which plantation is carried out are

- required. Also, the details of availability of coal as per approved mining plans and coal extracted in relevance with area are required.
- e) The sub-committee visited the site of CAAMS. One CAAMS is not in working condition, while the location of other CAAMS (which is in working condition) is not relevant to CPCB guidelines. Additional three number of CAAMS shall be installed at places where the PM10/PM2.5 values of baseline data exceeds the values of Annual average concentration limits. The budget provision for the same is needed.
- f) The dedicated corridor for coal transportations needs repair. The road condition is not satisfactory. The provision of budget shall be made for the same.
- g) The LNG/CNG based mining machineries and trucks are not observed. From energy conservation point of view, PP shall make adequate budgetary provision for solar energy.
- h) The transportation of coal through silo of 10 MTy is in working condition. Additionally, the silo work of additional 15MTy is almost completed. However, the functioning of the same is not yet started due to rail connectivity. It functioning of the 15 MTy shall be started as early as possible.
- i) Along with the impact of all coal mines in cluster and other industries on coal evacuation system and different environmental parameters, the collective EIA-EMP of all mines in cluster shall also cover the aspect of afforestation and plantation details.
- j) A representation of nearby villagers met to sub-committee members. In the proposed EMP, due consideration shall be given to socioeconomic and environmental problems of these villagers.
- k) Public consultation was advised. Accordingly, as stated in Specific Condition (viii) & representation of villagers, PP shall submit plan for drinking water supply through dedicated pipeline for nearby villagers.
- As per General ToR conditions (xxxvii), details of waste OB & Top soil generated, progressive development of mining and mine closure plan, green belt development, backfilling program and conceptual post mining land use plan shall be given.
- m) As assured in Half Yearly progress report of September 2023, the land after mining should be restored for agriculture or Forestry purpose during mine closure stage. The information of the same shall be given.
- After receipt of forest clearance and compliance of standard ToR conditions, Additional ToR conditions and suggestions of sub-committee

of EAC, the proposal of EC may be examined by EAC. The PP has to submit the assured action plan and adequate budgetary provisions for different items as mentioned in EMP. The observations of sub-committee may be intimated to Project Proponent for necessary action.

Signatures:

Shri Inder Pal Singh Matharu- Chairman



2. Dr S Chandrashekhar- Member



Shri U J Kahalekar- Member



4. Mr. Sandeep Nandi- Scientist B, Regional Office, Bhubneshwar,

MoEFCC

ANNEXURE-VI

<u>LIST OF PARTICIPANTS OF EAC (COAL) IN 15^h MEETING HELD ON 18-19th</u> <u>SEPTEMBER, 2024 THROUGH VIRTUAL MODE</u>

| S. No. | Name & Address | Role | 18.09.2024 | 19.09.2024 |
|--------|---|---|------------|------------|
| 1. | Dr. Sharad Singh Negi (I.F.S. Retd.) | Chairman | Present | Present |
| 3. | Shri Inder Pal Singh Matharu, IFS (Retd.) | Member | Present | Present |
| 3. | Shri Lalit Kapur | Member | Present | Present |
| 4. | Dr. Umesh Jagannathrao Kahalekar | Member | Present | Present |
| 5. | Dr. Santosh Kumar Hampannavar | Member | Present | Present |
| 6. | Shri Savalge Chandrasekhar | Member | Present | Present |
| 7. | Shri K. B. Biswas | M <mark>ember</mark> | Present | Present |
| 8. | Prof. Shyam Shanker Singh | Member | Present | Present |
| 9. | Dr. Vinod Agrawal | Member | Present | Present |
| 10. | Dr Nazimuddin, Scientist - F | Representative of Central Pollution Control Board | Absent | Present |
| 11. | Shri Mahi Pal Singh, Chief Engineer | Representative of Central Electricity Authority (CEA) | Present | Present |
| 13. | Shri Harmeet Sahaney | Representative of Indian Meteorological Department (IMD) | Absent | Absent |
| 13. | Prof. R M Bhattacharjee | Representative of IIT/ISM Dhanbad | Present | Present |
| 14. | Shri Sundar Ramanathan | Member Secretary | Present | Present |
| MOEF& | kCC | | • | |
| 1. | Sh. Rajesh Prasad Rastogi | Scientist 'D' | Present | Present |

APPROVAL OF CHAIRMAN EAC

