



सत्यमेव जयते

File No.: J-11015/171/2015-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 10/10/2025



To,

Sh. Awadh Kishore Pandey
M/s. Mahanadi Coalfields Limited
At Po Jagruti Vihar, BurlaSamabalpur, Odisha -768020
E-mail: gm-env.mcl@coalindia.in

Subject: **Integrated Lakhanpur Belpahar Lilari Opencast Project (increase in production capacity from 40 MTPA to 48 MTPA, with decrease in ML area from 4399.246 Ha to 4257.606 Ha), by M/s Mahanadi Coalfields Limited, located in IB Valley Coalfield, Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha - EC for expansion up to 20% of capacity (i.e., 1st phase of 20%) as per the provisions of Ministry's OM dated 11.04.2022 – regarding.**

Sir/Madam,

This is with reference to your online application vide proposal no. IA/OR/CMIN/546648/2025 dated 07.08.2025 along with written submission dated 22.09.2025 seeking for Environmental Clearance under the provisions of EIA notification 2006 and as amended therein for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0101OR5405415N
(ii) File No.	J-11015/171/2015-IA-II(M)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Integrated Lakhanpur Belpahar Lilari Opencast Project
(viii) Location of Project (District, State)	Jharsuguda, Odisha
(ix) Issuing Authority	MoEF&CC
(x) Applicability of General Conditions	No

3. M/s Mahanadi Coalfields Ltd. has made an online application in Form 1 (A, B & C) vide proposal no. IA/OR/CMIN/546648/2025 dated 07.08.2025 along with copy of EIA/EMP report, Form and Certified compliance report

seeking expansion in Environment Clearance (EC) under the provisions of the EIA Notification, 2006, for the project mentioned above. The proposed project activity is listed at schedule no.1 (a) under Category “A” of the schedule of the EIA Notification, 2006.

4. The instant proposal was considered in 31st EAC meeting held on 28.08.2025. Written information was submitted by the PP on 22.09.2025. The MoM for the same may be seen using the web link: parivesh.nic.in.

Details submitted by the project proponent

5. The project of M/s Mahanadi Coalfields Ltd is a brownfield project for expansion of production capacity from 40 to 48 MTPA, for the first phase of 20% expansion as per Ministry’s OM dated 11.04.2022, with reducing the existing mine lease area of 4399.246 Ha to 4257.606 Ha for establishing coal to ammonium nitrate plant for which ToR obtained from MoEF&CC vide no. IA-J-11011/331/2024/IA-II (I) on 04.03.2025.

6. Previous Approvals: PP submitted the details of previous approvals in the chronological order as follows:

S. 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-11015/15/2019-IA-II(M)	Fresh EC	40	4399.246	15.01.2024	Under Implementation
2	IA-J-11015/15/2019-IA-II(M)	EC Amendment	40	4399.246	13.08.2024	
3	IA-J-11015/15/2019-IA-II(M)	EC Amendment	40	4399.246	30.05.2025	

The mine is under operation since 2023-24 based on the consent from the State Pollution Control Board. CTO renewal has been obtained from the SPCB vide letter no. 14107/IND-I-CON-6945 and is valid up to 31.03.2026

Year	EC Capacity (MTPA)	Actual Coal production (Million tonnes)	Excess production beyond the EC sanctioned capacity (Million tonnes)
2023-24	40	0.699	0
2024-25	40	39.99	0

In pursuance to the OM dated 11.04.2022, certified compliance report of the EC granted for 20% expansion, along with EIA/EMP report, for the additional capacity of 20% was submitted though PARIVESH portal on 07.08.2025 by the project proponent.

7. **Certified Compliance Report:** The certified compliance report was obtained from Regional Office; Bhubaneswar vide letter no: 101-1127/25/EPE/194 dtd. 27.03.2025 in the name of Integrated Lakhanpur Belpahar Lilari Project of M/s. Mahanadi Coalfields Limited. The Action taken report regarding the partially/ non-complied condition was submitted to Regional Officer MoEF&CC, Bhubaneswar vide letter no. MCL/LKPA/Intg. L-B-L OCP/PO/Envnt./2025/10 dated 10.04.2025.

8. **Environmental Site Settings:** The project area is covered under Survey of India Topo Sheet No 64 O/13 & 64 O/14 (RF 1:50,000) and is bounded by the geographical coordinates ranging from Latitude 21°42'25.89"N to 21°47'24.82"N and Longitudes 83°49'38.9"E to 83°49'53"E.

Project falls in the Severely Polluted Area (SPA), as per CEPI assessment 2018 (falls in Ib Valley Area with a CEPI score of 66.35).

Since the project falls in the SPA region therefore, as per the EC letter dtd. 15.01.2024 the following 11 additional conditions were imposed and the compliance status of the same is given below:

No.	Specific Condition	Compliance Status
1	Transportation of materials by	The condition has been amended vide no. IA-J-11015/15/2019-IA-II (M) dated

No.	Specific Condition	Compliance Status																																																														
	rail/conveyor belt with silo loading facility shall be implemented for 40 MTPA.	<p>30.05.2025 as follows: “Transportation of materials by rail/ conveyor belt with silo loading facility shall be implemented for 40 MTPA by 31.12.2027 and thereafter only 10% of the total production of coal shall be allowed to be transported through road to the local consumers, up to a distance of 100 km only.” The project is following the coal dispatch plan outlined in the approved Mining Plan of Integrated Lakhanpur-Belpahar-Lilari OCP.</p> <p style="text-align: center;">Table A: Present Dispatch Arrangement</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Coal in MTPA</th> <th>Dispatch medium</th> </tr> </thead> <tbody> <tr> <td></td> <td>10.0</td> <td>Pipe conveyor, washery and rail Siding 6 & 7</td> </tr> <tr> <td></td> <td>20.0</td> <td>By rail Siding no. 3, 6 & 7 within Mine Lease</td> </tr> <tr> <td></td> <td>6.5</td> <td>Local sale by road</td> </tr> <tr> <td></td> <td>3.5</td> <td>To OPGC by Rail through Charla Siding within Mine Lease</td> </tr> <tr> <td>Total</td> <td>40.0</td> <td></td> </tr> </tbody> </table> <p>Total Transport Through Rail: 33.5 MTPA (83.75%) Total Transport Through Road: 6.5 MTPA (16.25%)</p> <p style="text-align: center;">Table B: Details of Coal Production and Coal Dispatch of the FY 2024-25</p> <table border="1"> <tbody> <tr> <td>Total Coal Production</td> <td>39.99 MT</td> </tr> <tr> <td>Total Coal Dispatch</td> <td>32.09 MT</td> </tr> <tr> <td>Coal Dispatch through Rail</td> <td>25.71 MT (80.10%)</td> </tr> <tr> <td>Coal Dispatch through Road Sale</td> <td>6.38 MT (19.90%)</td> </tr> </tbody> </table> <p style="text-align: center;">Table C: Proposed Dispatch Arrangement</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Coal in MTPA</th> <th>Dispatch medium</th> <th>Status / Timelines</th> </tr> </thead> <tbody> <tr> <td>1a</td> <td>10.0</td> <td>Pipe conveyor, Washery (10 MTPA) Budget- Rs. 396.69 Crs.</td> <td>In operation</td> </tr> <tr> <td>1b</td> <td></td> <td>SILO Phase-I (Physical Progress-99.95%, Financial Progress-99.80%) Budget- Rs. 173.38 Crs.</td> <td>By 31.12.2025</td> </tr> <tr> <td>1c</td> <td></td> <td>Rail line connectivity for SILO is under construction and requires land handover form State Authorities as per Stage II FC dated 19.02.2025</td> <td>By 31.12.2025</td> </tr> <tr> <td>2</td> <td>20.0</td> <td>By conveyor belt and SILO Phase II Budget – Rs. 473.09 Crs.</td> <td>By 31.12.27^{\$}</td> </tr> <tr> <td>3</td> <td>4.0</td> <td>Local sale by road through ATLS Budget -Rs.77.06 Crs.</td> <td>By 30.06.27*</td> </tr> <tr> <td>4</td> <td>3.5</td> <td>To OPGC by Rail through Charla Siding within Mine Lease</td> <td>In operation</td> </tr> <tr> <td>5</td> <td>2.5</td> <td>By rail Siding no. 6 & 7 within Mine Lease</td> <td>In operation*</td> </tr> <tr> <td>Total</td> <td>40.0</td> <td></td> <td></td> </tr> </tbody> </table> <p>Total Coal Transport through Mechanized System: 36 MTPA (90%) Total Coal Transport through Road Sale: 4 MTPA (10%)</p> <p>^{\$} A tender notice has been floated for construction of Silo loading system of 20.0 MTPA capacity on 28.02.2025. Bid opening date is 25.04.2025. Work completion time will be 2 years with operation and maintenance period of 5 years.</p>	S. No.	Coal in MTPA	Dispatch medium		10.0	Pipe conveyor, washery and rail Siding 6 & 7		20.0	By rail Siding no. 3, 6 & 7 within Mine Lease		6.5	Local sale by road		3.5	To OPGC by Rail through Charla Siding within Mine Lease	Total	40.0		Total Coal Production	39.99 MT	Total Coal Dispatch	32.09 MT	Coal Dispatch through Rail	25.71 MT (80.10%)	Coal Dispatch through Road Sale	6.38 MT (19.90%)	Sl. No.	Coal in MTPA	Dispatch medium	Status / Timelines	1a	10.0	Pipe conveyor, Washery (10 MTPA) Budget- Rs. 396.69 Crs.	In operation	1b		SILO Phase-I (Physical Progress-99.95%, Financial Progress-99.80%) Budget- Rs. 173.38 Crs.	By 31.12.2025	1c		Rail line connectivity for SILO is under construction and requires land handover form State Authorities as per Stage II FC dated 19.02.2025	By 31.12.2025	2	20.0	By conveyor belt and SILO Phase II Budget – Rs. 473.09 Crs.	By 31.12.27^{\$}	3	4.0	Local sale by road through ATLS Budget -Rs.77.06 Crs.	By 30.06.27*	4	3.5	To OPGC by Rail through Charla Siding within Mine Lease	In operation	5	2.5	By rail Siding no. 6 & 7 within Mine Lease	In operation*	Total	40.0		
S. No.	Coal in MTPA	Dispatch medium																																																														
	10.0	Pipe conveyor, washery and rail Siding 6 & 7																																																														
	20.0	By rail Siding no. 3, 6 & 7 within Mine Lease																																																														
	6.5	Local sale by road																																																														
	3.5	To OPGC by Rail through Charla Siding within Mine Lease																																																														
Total	40.0																																																															
Total Coal Production	39.99 MT																																																															
Total Coal Dispatch	32.09 MT																																																															
Coal Dispatch through Rail	25.71 MT (80.10%)																																																															
Coal Dispatch through Road Sale	6.38 MT (19.90%)																																																															
Sl. No.	Coal in MTPA	Dispatch medium	Status / Timelines																																																													
1a	10.0	Pipe conveyor, Washery (10 MTPA) Budget- Rs. 396.69 Crs.	In operation																																																													
1b		SILO Phase-I (Physical Progress-99.95%, Financial Progress-99.80%) Budget- Rs. 173.38 Crs.	By 31.12.2025																																																													
1c		Rail line connectivity for SILO is under construction and requires land handover form State Authorities as per Stage II FC dated 19.02.2025	By 31.12.2025																																																													
2	20.0	By conveyor belt and SILO Phase II Budget – Rs. 473.09 Crs.	By 31.12.27^{\$}																																																													
3	4.0	Local sale by road through ATLS Budget -Rs.77.06 Crs.	By 30.06.27*																																																													
4	3.5	To OPGC by Rail through Charla Siding within Mine Lease	In operation																																																													
5	2.5	By rail Siding no. 6 & 7 within Mine Lease	In operation*																																																													
Total	40.0																																																															

No.	Specific Condition	Compliance Status																																							
		<p>* The 6.5 MTPA coal dispatch through road has been curtailed to 4 MTPA which will be done through Automatic Truck Loading system and rest 2.5 MTPA will be dispatched through railway siding 6&7. However, the mine is undergoing expansion from 40 to 48 MTPA, for which the proposed dispatch is provided below:</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Quantity (MTPA)</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">By Rail</td> </tr> <tr> <td>1.</td> <td>20</td> <td>Through internal coal transportation road to rail siding no. 1,2, 3, 6 & 7 within/adjacent to Mine Lease</td> </tr> <tr> <td>2.</td> <td>10</td> <td>Through Pipe conveyor to washery</td> </tr> <tr> <td>3.</td> <td>1.15</td> <td>To Odisha Power Generation Corporation (OPGC) by Rail through Charla Siding within Mine Lease</td> </tr> <tr> <td>4.</td> <td>1.5</td> <td>To EMCL washery by road (adjacent to ML boundary) and further to TPP by rail #</td> </tr> <tr> <td>5.</td> <td>1.35</td> <td>To Alps washery by road and further to TPP by rail</td> </tr> <tr> <td>6.</td> <td>4</td> <td>By Road (5-6 km) cum Rail mode at customers rail siding</td> </tr> <tr> <td>Sub-Total (a)</td> <td>38</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center;">By Road</td> </tr> <tr> <td>7.</td> <td>10</td> <td>Local sale by road to the small consumers within 25-30 km</td> </tr> <tr> <td>Sub-Total (b)</td> <td>10</td> <td></td> </tr> <tr> <td>Grand Total (a+b)</td> <td>48</td> <td></td> </tr> </tbody> </table>	Sl. No.	Quantity (MTPA)	Mode	By Rail			1.	20	Through internal coal transportation road to rail siding no. 1,2, 3, 6 & 7 within/adjacent to Mine Lease	2.	10	Through Pipe conveyor to washery	3.	1.15	To Odisha Power Generation Corporation (OPGC) by Rail through Charla Siding within Mine Lease	4.	1.5	To EMCL washery by road (adjacent to ML boundary) and further to TPP by rail #	5.	1.35	To Alps washery by road and further to TPP by rail	6.	4	By Road (5-6 km) cum Rail mode at customers rail siding	Sub-Total (a)	38		By Road			7.	10	Local sale by road to the small consumers within 25-30 km	Sub-Total (b)	10		Grand Total (a+b)	48	
Sl. No.	Quantity (MTPA)	Mode																																							
By Rail																																									
1.	20	Through internal coal transportation road to rail siding no. 1,2, 3, 6 & 7 within/adjacent to Mine Lease																																							
2.	10	Through Pipe conveyor to washery																																							
3.	1.15	To Odisha Power Generation Corporation (OPGC) by Rail through Charla Siding within Mine Lease																																							
4.	1.5	To EMCL washery by road (adjacent to ML boundary) and further to TPP by rail #																																							
5.	1.35	To Alps washery by road and further to TPP by rail																																							
6.	4	By Road (5-6 km) cum Rail mode at customers rail siding																																							
Sub-Total (a)	38																																								
By Road																																									
7.	10	Local sale by road to the small consumers within 25-30 km																																							
Sub-Total (b)	10																																								
Grand Total (a+b)	48																																								
2	Encourage use of cleaner fuels for trucks, If the roads required to be widened up to nearest railway siding, the same be constructed to avoid traffic congestion.	A study has been being carried out by GAIL, BEML and CIL for use LNG in 2 nos. of dumpers in Integrated Lakhanpur-Belpahar-Lilari OCP. The trial study has been completed, and the report has been prepared, and the scrutiny of the report is under progress. A trial of 01 no. EV Payloader and 02 nos. of EV Dumpers have been carried out in the project. MCL is now actively evaluating service provisions through the National Productivity Council, Patna, that explicitly encompass excavation, removal, loading, and transportation of overburden and coal. Notably, this includes the deployment of fleets comprising at least 20% electric or battery-operated dumpers and equipment. Further dedicated concrete roads have been constructed for transportation of coal to sidings.																																							
3	Increase green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.	The project proponent has reported that the Integrated Project consists of three components: Lakhanpur OCP, Belpahar OCM, and Lilari OCP. The project commenced on March 27, 2024. Currently, rehandling of the existing overburden (OB) is necessary for the mine's operations. According to the approved mining plan, a total area of 3759.419 hectares will be progressively reclaimed, which accounts for ~89% of the total mine lease area. Till date, 372.455 ha land has been biologically reclaimed within the mine lease area.																																							
4	Greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc. shall	Plantation is being carried out outside the lease through the State Forest Department. Till date 239.865 Ha (3.41 lakh saplings) of land have been planted outside the lease area through the State Forest Department in Jharsuguda District at a cost of Rs. 18.05 crores.																																							

No.	Specific Condition	Compliance Status
	be implemented.	
5	Assessment of carrying capacity of mine & road transportation shall be done as per the State Plan/instructions.	A study has been conducted for carrying capacity of Road transportation and traffic management study with the preparation of EIA/EMP Report and has been submitted to the MoEF&CC in EIA-EMP report. For the carrying capacity of the mine, the study has been awarded to CMPDI on 30.06.2025, for which time period will be one year & three months.
6	Reuse/recycle of treated wastewater shall be implemented as feasible with latest technology. Zero liquid discharge concept may be adopted.	It is submitted that the strata and stormwater are channelised to the mine sump, which is used for dust suppression and mining-related activities. Water is not discharged outside. The project's Effluent Treatment Plants are equipped with a zero liquid discharge concept and are recycled and reused.
7	PP to install Continuous monitoring station for ambient air quality and also continuous effluent quality in ETP shall be installed. Data so generated shall be linked with respective SPCB and CPCB websites.	It is submitted that 2 Nos. of Continuous Ambient Air quality monitoring stations has been installed in Indradhanush club and Lakhanpur tehsil office and the data has been linked to SPCB and CPCB websites. Further, additional 02 nos. of CAAQMS will be installed in the project as per the approval of RO SPCB Jharsuguda for which bid on GeM has been placed on 01.08.2025. The additional 2 CAAQMs will be installed by December 2025. A bid has been placed on 21.07.2025 vide Bid Number: GEM/2025/B/6446095 for procurement of 03 nos. of Continuous Online Water Quality Monitoring System with CAMC of 5 years after 03-year warranty. The Continuous Online Water Quality Monitoring System will be installed at the Effluent Treatment Plants by December 2025. Further, regular monitoring of ETP effluent at sedimentation tank is being carried out by CMPDI and the monitoring data is being submitted to SPCB and IRO MoEF&CC with half yearly EC compliance report.
8	A detailed water harvesting plan may be prepared by the project proponent for water augmentation and submitted to Regional Office of MoEF&CC.	A study regarding Water Harvesting and Artificial Recharge has been conducted in EIA/EMP of the project and action are being taken as per the plan. Rainwater harvesting is carried out by channelising surface runoff into the mine sump for storing and recharge of ground water. Further 06 nos. of Rainwater Harvesting structures have been constructed at the administrative building of Integrated Lakhanpur-Belpahar-Lilari OCP for ground water recharge of total rooftop area of 2070.8 m ² , which is reported to recharge groundwater to a quantity of 2393 m ³ /year.
9	The project proponent shall install STP for generated domestic wastewater and should meet for discharge standard.	A STP of 1.7 MLD is established in the residential colony and soak pits are also constructed. The discharge from STP is being monitored at regular intervals.
10	More stringent norms for management of hazardous waste like oil container, ETP sludge etc shall be adopted. The waste generated should be preferably utilized in co-processing.	Integrated Lakhanpur-Belpahar-Lilari OCP has been granted Hazardous Waste Authorization by State Pollution Control Board, Odisha vide no. IND-IV-HW-1450/5811 dated 24.03.2025 and validity till 31.03.2026. Hazardous wastes are sold to SPCB authorized recyclers till the waste is stored at dedicated impervious Hazardous waste disposal pit under covered shed.
11	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	A work order for Third party audit of compliance of EC conditions of the project at an interval of six months was awarded to CSIR-NEERI vide no. MCL/GM/LKPA/AEO/2024-25/103 dated 13.12.2024 at a cost of Rs. 16.52 Lakhs and the audit has been carried out by CSIR NEERI on 13th and 14th February 2025. The Final Third Party Audit Report has been obtained on 18.08.2025 and submitted to IRO, MoEF&CC on 23.08.2025.

Mining Lease: PP submitted the following details of the mining lease:

S. No.	Govt. Order/Notifications as the case may be	Area (Ha)	Date of expiry of lease	Area involved in instant proposal (Ha)	Remarks
1	Notification of IB Block-II vested U/s 11(1) of CBA Act dtd 04.09.1981	2123.76	As the land acquired under CBA Act 1957, the lease validity is perpetual.	4257.606	Out of this total 5669.72 ha block allotment, which is completely acquired under CBA (A&D) 1957, only 4,257.606 ha has been taken as ML area and the remaining land will be considered for future expansion or new projects.
2	Notification of IB Block-VI Part-I vested U/s 11(1) of CBA Act dtd 26.11.1986	400.04			
3	Notification of IB Block-VI Part-II vested U/s 11(1) of CBA Act dtd 15.12.1988	3145.92			
	TOTAL	5669.72		4257.606	

Land requirement details of the project:

Nature of land involved	Existing Area (Ha)	Additional area (Ha)	Total Area required after expansion (Ha)
Non-Forest Land	3440.551	-141.64	3298.911
Forest Land	958.695	0	958.695
Total	4399.246	-141.64	4257.606

Forest Area: The project involved total forest land of 958.695 ha. The details of forest land approval already obtained or applied for is as follows:

S. No.	Obtained vide letter no.	Area (ha)	Stage I/II	Validity
1.	8- 280/89-FC dated 08-10-1990	233.43	Stage II	Life of the Mine
2.	8-104/91-FC dated 02-06-2000	103.52	Stage II	
3.	8-104/1991-FC dated 15-09-2014	19.70	Stage II	
4.	F.No.8-93/2012-FC dated 19-01-2015	10.453	Stage II	
5.	5-ORA155/2012-BHU dated 10-01-2020	12.319	Stage II	
6.	8- 281/8-FC dated 31-07-1990	162.20	Stage II	
7.	8-280/1989-FC Vol. (170901) Dated 19-02-2025	417.073	Stage II	
	Total Forest land	958.695		

Total broken forest area in the said project is 276.089 ha (as on 31.03.2025) and PP submitted that there is no violation of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

Protected Area: 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.

There is presence of Schedule – I species, seven schedule I species present in core zone Indian grey mongoose, Porcupine, Jungle cat, Golden jackal, Indian Chameleon, Indian cobra and Indian rat snake. Ten schedule I species present in buffer zone Grey wolf, Indian grey mongoose, Indian Porcupine, Sambhar, Golden jackal, Jungle cat, Striped Hyaena, Indian Chameleon, Indian cobra & Russell's viper. A Site-Specific Wildlife Conservation Plan has approved by PCCF (WL), Odisha vide letter no. 8369 dated 22.07.2024 for an amount of Rs. 3250.72 lakhs. Payment of Rs. 3250.72 lakhs have been paid on 30.08.2024.

Other Sensitive Receptors:

Project site proximity to sensitive area	Distance in km (within 5 km from the ML area)			
	S. No.	Habitation	Distance in km	Direction (w.r.t to mine boundary)
i. Habitation	1.	Bandhbahal	1.06	East

Project site proximity to sensitive area	Distance in km (within 5 km from the ML area)			
		2.	Belpahar	5.00
	3.	Brajrajnagar	6.48	North-East
ii. School	S. No.	School	Distance in km	Direction (w.r.t to mine boundary)
	1	Jorabaga High School	Within mine lease	--
	2	Khandsar Primary School	Within mine lease	--
	3	Upper Primary School, Adhapara	0.35	South East
	4	Dahaldera Upper Primary School	0.6	West
	5	Bandhbahal High School	0.8	East
	6	DAV Higher Secondary School, Bandhbahal	1.0	East
	7	Belpahar English Medium School	1.6	North
	8	Saraswati Shishu Bidya Mandira, Bandhbahal	1.2	East
	9	Vivekanand Internation School, Belpahar	1.2	North
	10	St. Mary's School, Telenpali	1.8	Southeast
11	Upper Primary School, Majhipara	2.3	East	
iii. River/ Waterbody	S. No.	Name of the Water Bodies	Distance in km	Direction (w.r.t to mine boundary)
	1	Ib river (HFL: 195.47 m)	3.7	East
	2	Lilari Stream	Within ML	-
	3	Pandren Stream	0.9	North East
	4	Hirakud reservoir	4.0	South
	5	Kandhal Stream	3.3	East
6	Bagdia Stream	1.7	West	
iv. Forest	S. No.	Name of Forest	Distance in km	Direction (w.r.t to mine boundary)
	1.	Kusraloi RF	Adjacent	South East
	2.	Remenda RF	Adjacent	South West
	3.	Malda RF	8.3	East
	4.	Rampur RF	6.9	East
	5.	Khair RF	8.0	North East
	6.	Rajpur RF	5.7	North
	7.	Bandhbahal PF	8.2	North West
	8.	Bikramakhhol RF	1.5	West
	9.	Bhanwarkhol RF	6.4	West
10.	Kardarha PF	9.0	North West	
v. Archaeological Survey of India (ASI) protected site	No			
vi. Any other	Sl. No.	Temples	Distance in km	Direction (w.r.t to mine boundary)
	1	Shiva Mandir - Soldia Village	Within mine	-

Project site proximity to sensitive area	Distance in km (within 5 km from the ML area)			
			lease	
	2	Jagannath Temple Bandhabahal	0.58	West
	3	Kalyan Mandap - Bandhabahal GP	1.15	West
	4	Maa Samalei Temple Bandhabahal	1.4	West
	5	Maa Bhattarika Temple - Kumbharbandh GP	2	South West
	6	Shiva Temple - Kirarama Village (Sarandamal GP)	2	West
	7	Jagannath Mandir - Lakhanpur GP	2	South East
Other mines:				
	Sl. No.	Nearby mines	Distance in km	Direction (w.r.t to mine boundary)
	1	Samleswari OCP	1	North
	2	Orient Area UG Mines	2	North-east
	3	Lajkura OCP	4	North

No river/ nallah diversions are proposed for the instant project and no diversion has been done previously.

Mitigation measures proposed for the sensitive receptors:

- i. The project is in process of establishing Silo + Conveyor Arrangement which will ensure ecofriendly dispatch of coal.
- ii. All trucks associated with coal dispatch will be strictly monitored for tarpaulin coverage for reducing fugitive emissions.
- iii. Higher capacity
- iv. trucks of 45-50 te capacity will be deployed for road sale to reduce the fleet size which further reduce emissions.
- v. Avenue plantation along coal transport routes will be strengthened.
- vi. Mobile fog cannons, high pressurized mist sprinklers & Mechanical Road sweepers will be deployed to arrest fugitive emissions.
- vii. Green barrier development in the vacant spaces between mines and habitation areas.

9. Method of Mining and Mining Plan: Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MCL Board vide letter MCL/SBP/CS/BD-281/Exct/2025/14879, dated 08-07-2025.

- i. Method of mining proposed to be carried out is opencast mining using combined mining system deploying shovel dumper combination and Surface Miner.
- ii. Total mineable reserve as per the mine plan as on 01.04.2025 was 1334.52 MT and the balance mineable reserve as on 01.04.2025 is 1262.86 MT. Percent of extraction is 94.63%.
- iii. There are 11 seams with thickness ranging from 0.1 m to 32.70 m are workable.
- iv. The average grade of coal is G-12 and stripping ratio is 4.64 cum/t.
- v. Life of mine is 20 years (As on 01.04.2025).
- vi. The project has external dump within its lease in an area of 22.65 ha with 30 m max height and 3327.198 ha with range of 90-110 m height and 4116.025 Mm³ of OB is envisaged in the project.
- vii. Total quarry area is 3565.484 ha out of which backfilling will be done in 3327.198 ha while final mine void will be created in an area of 238.286 ha with a depth of 354 m. (At the time of mine closure, the final depth of the quarry is proposed to be reduced to approximately 140-160 meters through progressive backfilling and reclamation measures). Backfilled quarry area of 3327.198 ha shall be reclaimed with plantation. Final mine void will be converted into water body.
- viii. Land-use details

A. Pre-Mining Land Use (within mine lease)

S. No.	Type of Land	Area (in ha)
1	Agricultural	1596.37

S. No.	Type of Land	Area (in ha)
2	Forest land	958.695
3	Wasteland NF (Barren)/ other use	1548.319
4	Grazing	85.52
5	Surface water bodies	12.02
6	Settlements (Township + Road)	56.682
Total Mining lease area		4257.606

B. Post Mining land use

S. No.	Category	Plantation*	Land use (in ha)				
			Water Body	Public/ Company Use	Forest* Land (Returned)	Un disturbed	Total
1.	Excavation Area	2540.952	238.286	-	786.246	-	3565.484
2.	Top Soil Dump	41.994	-	-	-	-	41.994
3.	OB dump (Within ML area)	22.650	-	-	-	-	22.650
4.	Safety Zone	24.095	-	-	-	-	24.095
5.	Road and Infrastructure area	171.033	-	259.901	134.039	-	564.973
6.	Undisturbed	-	-	-	38.410	-	38.410
Total ML Area		2800.724	238.286	259.901	958.695	-	4257.606

***Note:** - Both plantation and forest land return will be the part of plantation. Void will be converted as water body at end of mine life.

ix. Details of transportation:

- In-pit to surface: By dumpers and tippers
- Surface to siding: By conveyor (2.14 km) & tippers through internal CT roads (3-7 km)
- Siding to loading: By tippers & silo
- Quantity being transported by road/ rail/ conveyor/ ropeway: 33.5 MT is being transported through rail while 6.5 MT through road currently.

Details of the existing coal transportation arrangement (for 40 MTPA)

S. No.	Coal in MTPA	Dispatch medium
i.	10.0	Pipe conveyor, washery and rail Siding 6 & 7
ii.	20.0	By rail Siding no. 3, 6 & 7 within Mine Lease
iii.	6.5	Local sale by road
iv.	3.5	To OPGC by Rail through Charla Siding within Mine Lease
Total	40.0	
Total transport through rail: 33.5 MTPA (83.75%)		
Total transport through road: 6.5 MTPA (16.25 %)		

Details of the proposed coal transportation arrangement (for 48 MTPA)

S. No.	Quantity (MTPA)	Mode
By Rail		
1.	20	Through internal coal transportation road to rail siding no. 1,2, 3, 6 & 7 within/adjacent to Mine Lease
2.	10	Through Pipe conveyor to washery
3.	1.15	To Odisha Power Generation Corporation (OPGC) by Rail through Charla Siding within Mine Lease
4.	1.5	To EMCL washery by road (adjacent to ML boundary) and further to TPP by rail
5.	1.35	To Alps washery by road and further to TPP by rail
6.	4	By Road (5-6 km) cum Rail mode at customers rail siding
Sub-Total (a)	38	
By Road		
7.	10	Local sale by road to the small consumers within 25-30 km
Sub-Total (b)	10	
Grand Total (a+b)	48	

x. Details of reclamations: Total afforestation for the instant project shall be done in 3759.419 ha. Reclamation on external OB dump of 22.65 ha, reclaimed backfilled area in the form of internal OB dumps of 3327.198 ha, greenbelt & safety zone of 62.505 ha, density of plantations shall be 2500 nos of plants per ha. A void of 238.286 ha at maximum depth of 354 m (At the time of mine closure, the final depth of the quarry is proposed to be reduced to approximately 140-160 meters through progressive backfilling and reclamation measures.)

10. Baseline data:

Period-season	Details
AAQ parameters at 10 Locations (min and max)	<p style="text-align: center;"><u>Core zone:</u></p> <p>a. $PM_{10} = 77.0 \text{ g/m}^3$ to 165 g/m^3</p> <p>b. $PM_{2.5} = 38.0 \text{ g/m}^3$ to 64 g/m^3</p> <p>c. $SO_2 = 18.4 \text{ g/m}^3$ to 36.2 g/m^3</p> <p>d. $NO_x = 15.6 \text{ g/m}^3$ to 42.6 g/m^3</p> <p>e. $CO = 0.80 \text{ mg/m}^3$ to 1.21 mg/m^3</p> <p>As per Coal Mine Standard, (GSR 742(E)) the values are well within the permissible limits</p> <p style="text-align: center;"><u>Buffer Zone:</u></p> <p>a. $PM_{10} = 48 \text{ g/m}^3$ to 78 g/m^3</p> <p>b. $PM_{2.5} = 21 \text{ g/m}^3$ to 38 g/m^3</p> <p>c. $SO_2 = 9.3 \text{ g/m}^3$ to 31.6 g/m^3</p> <p>d. $NO_x = 15.5 \text{ g/m}^3$ to 48.5 g/m^3</p> <p>e. $CO = 0.64 \text{ mg/m}^3$ to 1.41 mg/m^3</p> <p>In buffer zone also values are well within the permissible limit of NAAQS-2009.</p>
Incremental GLC Level	<p style="text-align: center;"><u>Core Zone:</u></p> <p>a. $PM_{10} = 53.2 \text{ g/m}^3$ Total GLC $218.2 \text{ } \mu\text{g/m}^3$</p> <p>b. $PM_{2.5} = 21.6 \text{ g/m}^3$ Total GLC $85.6 \text{ } \mu\text{g/m}^3$</p>

Period-season	Details			
	c.	SO ₂ = 38.2 g/m ³ Total GLC 74.4 µg/m ³		
	d.	NO _x = 21.2 g/m ³ Total GLC 63.8 µg/m ³		
		<i>Buffer Zone:</i>		
	a.	PM ₁₀ = 14.9 g/m ³ Total GLC 92.9 µg/m ³		
	b.	PM _{2.5} = 7.1 g/m ³ Total GLC 44.1 µg/m ³		
	c.	SO ₂ = 22.7 g/m ³ Total GLC 47.8 µg/m ³		
	d.	NO _x = 23.5 g/m ³ Total GLC 67.1 µg/m ³		
Groundwater quality at 6 Locations	For Core Zone			
	Sl. No.	Parameter	Minimum	Maximum
	1	pH at 25°C	6.81	6.81
	2	TDS (mg/L)	148	148
	3	Total Hardness as CaCO ₃ (mg/L)	79.47	79.47
	4	Nitrate (mg/L)	0.5	0.5
	5	Chlorides (mg/l)	27.23	27.23
	6	Fluoride (mg/l)	0.44	0.44
	7	Calcium(mg/L)	19.09	19.09
	8	Sulphate(mg/L)	40.12	40.12
	9	Copper(mg/L)	0.03	0.03
	10	Manganese (mg/L)	0.04	0.04
	11	Iron(mg/L)	0.1	0.1
	12	Zinc(mg/L)	0.04	0.04
	13	Lead(mg/L)	0.005	0.005
	14	Cadmium(mg/L)	0.001	0.001
	15	Total Chromium (mg/L)	0.01	0.01
	16	Arsenic(mg/L)	0.005	0.005
	17	Selenium(mg/L)	0.005	0.005
	18	Hexavalent Chromium (as Cr+6) (mg/L)	0.05	0.05
	For Buffer zone			
Sl. No.	Parameter	Minimum	Maximum	
1	pH at 25°C	6.86	8.21	
2	TDS (mg/L)	262	764	
3	Total Hardness as CaCO ₃ (mg/L)	123.18	373.52	
4	Nitrate (mg/L)	0.5	19.29	
5	Chlorides (mg/l)	36.95	118.64	
6	Fluoride (mg/l)	0.36	0.73	
7	Calcium(mg/L)	22.27	112.92	
8	Sulphate(mg/L)	33.56	135.65	
9	Copper(mg/L)	0.03	0.03	
10	Manganese (mg/L)	0.04	0.04	
11	Iron(mg/L)	0.1	0.1	
12	Zinc(mg/L)	0.04	0.04	
13	Lead(mg/L)	0.005	0.005	
14	Cadmium(mg/L)	0.001	0.001	
15	Total Chromium (mg/L)	0.01	0.01	

Period-season	Details			
	16	Arsenic(mg/L)	0.005	0.005
	17	Selenium(mg/L)	0.005	0.005
	18	Hexavalent Chromium (as Cr+6) (mg/L)	0.05	0.05
Surface water quality at 6 Locations	For Core Zone			
	Sl. No.	Parameter	Minimum	Maximum
		pH at 25°C	6.98	7.34
		TSS (mg/L)	42	66
	3.	BOD (mg/L)	2	2
	4.	COD (mg/L)	12	16
		TDS (mg/L)	318	526
	6.	Total Coliform MPN (Index/100 ml)	48	58
		Chlorides (mg/l)	21.39	23.34
		Fluoride (mg/l)	0.52	0.86
	9.	DO (mg/L)	6.4	6.6
	10.	Total Hardness(mg/L)	139.08	154.97
	11.	Copper(mg/L)	0.03	0.03
	12.	Manganese (mg/L)	0.04	0.04
	13.	Iron(mg/L)	0.1	0.1
	14.	Zinc(mg/L)	0.04	0.04
	15.	Lead(mg/L)	0.005	0.005
	16.	Cadmium(mg/L)	0.001	0.001
	17.	Total Chromium (mg/L)	0.01	0.01
	18.	Arsenic(mg/L)	0.005	0.005
	19.	Selenium(mg/L)	0.005	0.005
	20.	Hexavalent Chromium (as Cr+6) (mg/L)	0.05	0.05
		For Buffer zone		
Sl. No.	Parameter	Minimum	Maximum	
	pH at 25°C	7.45	8.23	
	TSS (mg/L)	23	46	
3.	BOD (mg/L)	2	2	
4.	COD (mg/L)	12	28	
	TDS (mg/L)	146	502	
6.	Total Coliform MPN (Index/100 ml)	31	84	
	Chlorides (mg/l)	23.34	38.9	
	Fluoride (mg/l)	0.53	0.74	
9.	DO (mg/L)	6.4	7	
10.	Total Hardness(mg/L)	75.5	290.07	
11.	Copper(mg/L)	0.03	0.03	
12.	Manganese (mg/L)	0.04	0.04	
13.	Iron(mg/L)	0.1	0.1	
14.	Zinc(mg/L)	0.04	0.04	
15.	Lead(mg/L)	0.005	0.005	
16.	Cadmium(mg/L)	0.001	0.001	
17.	Total Chromium (mg/L)	0.01	0.01	
18.	Arsenic(mg/L)	0.005	0.005	
19.	Selenium(mg/L)	0.005	0.005	

Period-season	Details				
	20.	Hexavalent Chromium (as Cr+6) (mg/L)	0.05	0.05	
Noise levels Leq (Day and Night)	45.1 to 64.0 dB(A) for the day time and 34.5 to 60.3 dB(A) for the Night time.				
Traffic assessment study findings	Traffic study involves the assessment of the current traffic scenario across different road sections, along with traffic impact analysis for the additional coal transportation of 8.85 MTPA , 4.85 MTPA via the existing CT road leading to NH-49, and 4.0 MTPA coal through proposed new route.				
	1	3.5 MTPA	10.0 MTPA (Total road sale) – 6.50 MTPA (Existing road dispatch for 40.0 MTPA)		
	2	1.35 MTPA	Alphs washery via the existing CT road		
	3	4.0 MTPA	Proposed new route from Southeastern end of the mine		
	4	8.85 MTPA	Total		
	Sl. no. 2 to 4 is Road cum Rail transport arrangement, which means part of coal transport will done through coal transport routes and finally through railway sidings.				
	Existing traffic details				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
	CT road	740	1500	0.49	C
	NH -49 towards Raigarh	558.45	1500	0.37	B
	NH 49-towards Jharsuguda	391.95	1500	0.26	B
	New proposed CT Road	77.95	900	0.09	A
	Proposed Traffic details				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
	CT road	808.92	1500	0.54	C
	NH -49 towards Raigarh	795.25	1500	0.53	C
	NH 49-towards Jharsuguda	525.15	1500	0.35	B
	New proposed CT Road	344.35	1500	0.23	B
	For section 1, 2 & 3: 2 lane (two way) as per IRC: 106-1990-1500 PCUs Currently section 4 having width of 7 m, 2 lane (two way) as per IRC-106-1990-900 PCUs. After proposed new road development section 4 will have 9 m width-1500 PCUs				
Flora and fauna	<p>a. Seven schedule I species present in core zone Indian grey mongoose, Porcupine, Jungle cat, Golden jackal, Indian Chameleon, Indian cobra, Indian rat snake.</p> <p>b. Ten schedule I species present in buffer zone Grey wolf, Indian grey mongoose, Indian Porcupine, Sambhar, Golden jackal, Jungle cat, Striped Hyaena, Indian Chameleon, Indian cobra & Russell's viper.</p> <p>c. A Site-Specific Wildlife Conservation Plan has approved by PCCF (WL), Odisha vide letter no. 8369 dated 22-07-24 for an amount of Rs. 3250.72 lakhs. Payment of Rs. 3250.72 lakhs have been paid on 30.08.2024</p>				
Water Requirement	Source of Water: a) Surface water b) Ground Water Ground Water Intersection: 6-7 mbgl				

Period-season	Details
	<p style="text-align: center;">Water Requirement: 14280 KLD</p> <p style="text-align: center;">NOC (For surface water):</p> <p style="text-align: center;">NOC (Ground Water):</p> <p style="text-align: center;">a. Lakhanpur OCP-NOC from CGWA has been obtained vide letter no. CGWA/NOC/MIN/ORIG/2020/9248, dtd 09.12.2020 and NOC renewal is awaited from CGWA.</p> <p style="text-align: center;">b. Belpahar OCM-CGWA approval has been obtained vide NOC no. CGWA/NOC/MIN/REN//1/2025/10603, dtd. 28.01.2025 and valid till 25/11/2026.</p> <p style="text-align: center;">c. The CTO, received from SPCB mentions that till obtaining NoC under CGWA for the new integrated project dewatering of mine pit water shall be regulated under the compliance of CGWA clearances obtained project wise i.e. Belpahar & Lakhanpur OCP.</p>

11. Water Requirement: PP submitted that the total water required for the project is 14280 KLD. Source of water is Mine Seepage Water, accumulated rainwater & backwater of Hirakud reservoir. Water usage quantity: Industrial use: 10920 KLD; Domestic use: 3360 KLD. NOC from CGWA obtained vide NOC no. CGWA/NOC/MIN/ORIG/2020/9248, dtd 09.12.2020 in respect of Lakhanpur OCP for which renewal is awaited & NOC no. CGWA/NOC/MIN/REN//1/2025/10603, dtd. 28.01.2025 in respect of Belpahar OCP which is valid till 25/11/2026. Potable water requirements are currently met through the Integrated Water Supply Scheme (IWSS) Hirakud Backwater reservoir as per the agreement communicated in letter no. MDD/10690 (WE) dtd 25.09.2023, by Superintendent Engg, Main Dam, Burla (Sambalpur) which is valid till 30.11.2025. Further, PP submitted that no water body is proposed to be diverted.

12. Power Requirement and details of diversion of Hi-Tension/ Transmission Line: Total electricity requirement is 30 MW. Presently Lakhanpur, Belpahar & Lilari opencast projects existing substations are receiving power at 33 kV, through four numbers single circuit 33 kV overhead line, drawn from 132/33 kV Jorabaga substation of MCL.

13. Solid and Hazardous Waste: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity Generated in 2024-25 in TPA	Mode of Treatment	Mode of Disposal
1.	Used Oil	HEMM Workshop	72.00	Storage in containers over impervious floor under well-ventilated covered shed	Auction to recyclers authorized by SPCB
2.	Waste/ Residues containing Oil	HEMM Workshop	0.2	Storage in impervious pits/containers under well-ventilated covered shed	Handed over to CHTDSF authorized by SPCB
3.	Empty Barrels contaminated with Chemicals/waste	HEMM Workshop	2.5	Storage on impervious floor under well-ventilated covered shed	Auction to recyclers authorized by SPCB
4.	Sludge & Filters contaminated with Oil	HEMM Workshop	10	Storage in impervious pits/containers under well-ventilated covered shed	Auction to recyclers authorized by SPCB
5.	Tyre waste	HEMM Workshop & Stores	442	Storage on impervious concreted platform under well-ventilated covered shed	Auction to recyclers authorized by SPCB
6.	Battery Waste	HEMM workshop	6.79	Stored in dedicated storeroom and Auction to recyclers, authorized by SPCB	Auction to recyclers authorized by SPCB
7.	Bio medical waste	Soiled cotton,	1.00	Stored in dedicated area at	Segregation &

S. No.	Type of Waste	Source	Quantity Generated in 2024-25 in TPA	Mode of Treatment	Mode of Disposal
		dressings, disposed syringes, medicine		the hospital.	incineration
8.	Domestic waste	Administrative building & residential area	651.23	MSW collection & landfilling	Auction to recyclers authorized by SPCB
9.	e-Waste	Office buildings	0.50	Stored in dedicated storeroom and Auction to recyclers, authorized by SPCB	Auction to recyclers authorized by SPCB
10	Plastic waste	Workshop & Regional Stores	1.00	Segregated & Stored in dedicated area	Auction to recyclers authorized by SPCB

14. Status of implementation of action plan as per the Public Consultation held on 06.12.2021 for the EC dated 15.01.2024:

Details of advertisement given	Times of India-04.11.2021 (English) Sambad-06.11.2021 (Odia)
Date of public consultation	06.12.2021 at 11.00 AM
Venue	Kandsar Primary M.E school, Kusraloi, Lakhanpur, Jharsuguda district.
Presiding Officer	Additional District Magistrate
Number of Person Attended Hearing	239
Number of representations received in writing from the district and outside of district, please give details:	26 persons had delivered their views and about 226 numbers of written representations were received during public hearing and 330 nos. of representation received directly by the board.
Major issues raised	Employment, Peripheral Development, R&R and Dust generation.

Action plan as per MoEF&CC O.M. dated 30/09/2020

(Figures in Rs. Lakhs)

S. No.	Physical targets/Action plan	Budget in Rs. Cr	Expenditure in 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
1	Employment and R&R activities - Resettlement & cash compensation	49413	2054.4	2821.6	12200	13308.6	9528.4	9500
2	Peripheral Development							
a	Infrastructure for Drinking water provisions	1716	236	250	270	290	320	350
b	Solar Lighting installations	275	25	30	50	50	60	60
c	Conducting health camps & supply of free medicines and other health care products as per need	285	30	30	45	50	65	65
d	Education- Construction & renovation of peripheral schools, additional classrooms, aid for digital platforms etc.	775	100	100	125	125	150	175
e	Development &	846	186	200	100	125	100	135

	maintenance of peripheral roads. Routine cleaning and repair of roads.							
3	Pollution Control includes deployment of addl. fixed sprinklers, mobile fog cannons, mist type mobile sprinklers, mechanical road sweepers, wheel washing units, instant shower systems, Vertical wind barrier, <i>Silo construction activities & construction of CT roads.</i>	71270	1419	3225	6317	52309	4000	4000
	Total	124580	4050.4	6656.6	19107	66257.6	14223.4	14285

Note: The Budget towards employment /R&R (Rs. 49413 Lakhs) and Silo/Conveyor constructions (Rs. 47309 Lakhs) & Road construction (Rs. 20731 Lakhs) are being deducted to obtain the PH budget for Rs. 7127 Lakhs which focus on major environmental targets.

15. EMP Budget: The capital cost of the proposed project is Rs. 243475 Lakhs and the capital cost for environmental protection measures is proposed as Rs 56349.61 Lakhs (including Rs. 47991 Lakhs for R&R). The annual recurring cost towards the environmental protection measures is proposed as Rs. 5837 Lakhs. The employment generation from the proposed project is 5760 (direct employment). The details of cost for environmental protection measures are as follows:

S. No.	Description of Item	Existing (In Lakh Rs.)		Proposed (In Lakh Rs.)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
(i)	Air Pollution Control/ Noise Management	-- *	3776.83	2930.00	3650.00
(ii)	Water Pollution Control	1215.60	527.72	3043.60	510.00
(iii)	Environmental Monitoring and Management	36.00	679.83	136.00	657.00
(iv)	Green Belt & Plantation Development	2249.01	1045.09	2249.01	1010.00
(v)	Other heads as proposed in EIA/committed during the EAC #	48021.00	--	47991.00	10.00
	TOTAL	51521.61	6029.47	56349.61	5837.00

*Integrated LBL is an amalgamation of three existing mine, capital cost for air pollution control measures were utilized from individual Lakhanpur OCP & Belpahar OCP.

It includes Rs. 47991 Lakhs for R&R cost.

16. Plantation: Existing green belt (green cover) has been developed in 372.455 ha area which is about 8.75 % of the total mine lease area of 4257.606 ha with total sapling of 931138 Trees. Proposed greenbelt (green cover) will be developed in 3386.964 ha which is about 72.98 % of the total mine lease area. Thus, total of 3759.419 ha area (88.3% of ML area) will be developed as green cover. A 7.5 m wide greenbelt, consisting of at least 3 tiers around mine boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 93,98,548 saplings will be planted and nurtured in 3759.419 hectares in 20 years (additionally in post-closure period).

17. Rehabilitation and Resettlement (R&R): A total of 6492 PAFs were involved for R&R during the initial R&R of the project. Total 662 PAFs has been provided settled, 1500 PAFs have been provided cash in lieu of plot, 2387 PAFs have been provided employment and 88 PAFs have been provided cash in lieu of employment. No. of PAFs under scrutiny for resettlement are 367.

Balance is 1488 cases which are undergoing assessment stage.

18. **Project Cost:** The capital cost of project was Rs. 243475 Lakhs and the capital cost for environmental protection measures is proposed as Rs. 56349.61 Lakhs as per the existing EIA/EMP report. The annual recurring cost towards the environmental protection measures is proposed as Rs. 5837 Lakhs.

19. **Details of pending litigation:** PP reported that there is a violation case related to Belpahar OCM has been registered under Sections 15 and 16 of the Environment (Protection) Act 1986, for production exceeding the approved EC capacity from 1995 to 2004 and 2007-2012. The case, referenced as 2(C) CC No-170 of 2013, is pending trial before the Sub-Divisional Judicial Magistrate, Jharsuguda in Odisha.

MCL challenged the orders of SDJM, Jharsuguda and Additional Session Judge, Jharsuguda before the Hon'ble High Court of Odisha. Hon'ble High Court, Odisha vide order dated 15.01.2014, as an interim measure stayed the order of case no. 2 (C) CC No.170/13 of SDJM, Jharsuguda and dismissed the case CRL MC No. 94/2014 on 26.08.2015.

Now, the case is pending for trial before Sub Divisional Judicial Magistrate (SDJM), Jharsuguda. Next date of hearing is still awaited.

20. **Written Submissions:** During the meeting PP submitted the following:

i. *PP shall submit details of the CAMPA Fund deposited as per the Site Specific Wildlife Conservation Plan of the Integrated Lakhanpur-Belpahar-Lilari OCP.*

Reply: The Site-Specific Wildlife Conservation Plan has been approved by the Principal Chief Conservator of Forests and Wildlife (PCCF), Odisha, and an amount of Rs. 31,09,38,400 has been deposited in the CAMPA portal. Furthermore, an amount of Rs. 1,41,33,600 has been deposited in "The Wildlife Odisha" as per the demand letter No. 4523/4F (Misc.). Dated:12.08.2024.

ii. *PP shall complete the boundary plantation in the mine within 3-5 years and submit the details of the plan.*

Reply: The periphery of Integrated Lakhanpur-Belpahar-Lilari OCP is surrounded by OB dump, Government non-forest land, Forest land, and Tenancy land. The Government non-forest land and Forest land are covered with natural vegetation, and the land possession process for the tenancy land in the periphery of the project area is underway.

The total perimeter of the mine lease area is 34 km, out of which natural vegetation extends 15.20 km. The remaining area will be developed as a Greenbelt, consisting of 3-tier plantations, with a width of not less than 7.5 m, all along the mine lease area, by June 2027, for an estimated cost of Rs 6.5 Cr.

A greenbelt of approximately 3.5 km in length has been developed along the eastern boundary of the mine lease area. The plantation has been undertaken using native species such as Shorea robusta (Sal), Cassia siamea (Chokandi), Adina cordifolia (Karanj), Madhuca longifolia (Mahua), etc. The greenbelt development has been carried out along the Regional Store, General Manager's Office, and Central Workshop buildings. The supporting geotagged photographs are attached.

In developing the green belt, a mix of native species, including Aam (Mangifera indica), Neem (Azadirachta indica), Mahua (Madhuca longifolia), Sal (Shorea robusta), Chokandi (Cassia siamea), and Karanj (Adina cordifolia) will be planted.

iii. *PP shall submit the plagiarism-checked EIA EMP.*

Reply: The EIA EMP, along with its plagiarism check is submitted.

iv. *PP shall submit an ATR with all tenders & work orders as deliberated in the partially complied conditions of IRO.*

Reply: The ATR to the IRO inspection report, along with all tenders and work orders.

v. *PP shall submit details of NoC obtained from CGWA & a written commitment for NoC under CGWA for Int LBL.*

Reply: The Integrated Lakhanpur-Belpahar-Lilari Opencast Project is an amalgamation of the Lakhanpur OCP, Belpahar OCM, and Lilari OCP. The NOC from the Central Ground Water Authority have been obtained for the individual projects, i.e. Lakhanpur OCP and Belpahar OCM, while Lilari OCP is an abandoned mine.

The Comprehensive Hydrogeological Report (CHR) for the Integrated Lakhanpur-Belpahar-Lilari OCP is currently under preparation, based on observations from the CGWA. However, as per the CTO dated 25.07.2025 received for the Integrated LBL Project from SPCB, it mentions that until obtaining a NoC under CGWA for the new integrated project,

the use and dewatering of mine pit water shall be regulated in compliance with the CGWA clearances obtained project-wise, i.e. Belpahar & Lakhanpur OCP.

For Belpahar OCP, the NOC has been obtained vide NOC no. CGWA/NOC/MIN/REN/1/2025/10603, which is valid up to 25.11.2026.

For Lakhanpur OCP, the first NOC from CGWA was obtained vide NOC no. CGWA/NOC/MIN/ORIG/2020/9248, which was valid from 09.12.2020 to 08.12.2022. A NOC renewal application was submitted on 02.12.2022 before the expiry of the previous NoC.

As per clause no 11 (vi) of the Gazette notification of the CGWA vide dtd. 24.09.2020, if the renewal application is submitted in time and the CGWA/ the respective State/ UT Authority is unable to process the application in time, No Objection Certificate shall be deemed to be extended till the date of renewal of No Objection Certificate. Hence, the NOC is deemed to be valid until the issuance of the NOC from CGWA. The CGWA approved the NOC renewal application on March 15, 2025. The issuance of the renewed NOC is awaited.

After preparation of the CHR (Comprehensive Hydrogeological Report) and issuance of the NOC letter for Lakhanpur OCP, both the NOCs of Lakhanpur & Belpahar will be surrendered, and an application will be submitted for the CGWA NOC of the Integrated Lakhanpur-Belpahar-Lilari OCP.

vi. PP shall ensure that the void depth shall not exceed 150 m in the post-mining phase scenario as submitted.

Reply: The proposed mine will be operated in multiple quarries with sequential mining. The central quarry will be exhausted after around 15 years & remaining void of this pit will be filled by backfilling OB dump from other quarries. In this process of sequential mining, dumping in the mine will be optimized & depth of void will be restricted up to a maximum depth of 150 m only.

vii. PP shall submit control measures for villages in the buffer zone where air values are high.

Reply: The details of existing and proposed air pollution control measures for the buffer zone of the Integrated Lakhanpur-Belpahar-Lilari OCP are as follows:

S. No	Control Measures	Quantity (Existing)	Quantity (Proposed)	Budget Estimate Proposed (Rs. in Cr)	Timeline
1	Mobile water tankers	38	05	10.00	May 2026
3	Mechanical Road Sweeper	03	01	2.00	Mar 2026
5	RLS/SILO/CONVEYOR	10 MTPA	20 MTPA	473.09	Dec 2027

With the additional Air Pollution Control Measures, Air Quality in the core zone, as well as in the buffer zone, will be significantly improved.

viii. PP shall revisit the coal transportation matrix and justify the increase in road sale.

Reply: The coal transportation matrix has been revised in further discussion with different stakeholders. The comparison of existing coal dispatch and the proposed dispatch matrix is provided below:

S. no.	Mode of coal despatch	Existing for 40 MTPA Coal Production	Proposed for 48 MTPA Coal Production during EAC meeting	Revisited for 48 MTPA Coal Production
		Figures in MTPA	Figures in MTPA	Figures in MTPA
1.	Rail despatch through existing Sidings within lease	33.50	31.15	31.15
2.	Road cum Railway despatch	--	6.85	9.35
	Subtotal (A)	33.50	38.00	40.50
3.	Road despatch	6.50	10.00	7.50
	Subtotal (B)	6.50	10.00	7.50
	Grand Total (A+B)	40.00	48.00	48.00

From the above figures, a total of 9.35 MTPA coal will be dispatched through road cum rail mode.

In case of washery the coal will be transported from the mine by road and thereafter washed coal will be dispatched to the

end user through rail.

Further after resurvey, the road distance from the mine to the nearest railway siding of the power plant has been revised from 5-6 km to 2.5 km. This railway siding will further be shifted to the pit head of the Integrated LBL mine by Aug 2026 making it 100% transport through rail.

Until then, the following control measures will be implemented along the CT routes to mitigate fugitive emissions from coal transportation through roads.

1. Deployment of two mobile water sprinkling tankers, fixed sprinklers, two mist cannons, one wheel washing system, one mechanical road sweepers along the coal transportation route and wind barrier along the siding.
2. A three-tier plantation of native species will be developed along the routes leading to the washeries
3. A three-tier plantation of native species will be developed along the approach roads to the power plant siding, and along the railway siding.
4. Widening of road towards railway siding of the Power Plant
5. Concreting of roads towards washeries & siding of Power Plant.
6. Regular cleaning of the roads to prevent dust accumulation.

ix. PP shall procure a Mobile Pollution Check Van for monitoring of environmental parameters.

Reply: A proposal for the Mobile Pollution Check Van will be initiated, and accordingly, the same will be deployed at the core zone, buffer zone and different transportation roads for monitoring and testing of environmental parameters. The timeline for procurement and deployment of the pollution check van will be Dec 2026.

x. PP shall submit a commitment for Amendment in EC for IB washery for which its lease area is to be excluded from the Integrated LBL Project.

Reply: The PP will amend the EC for Ib Washery to exclude its lease area from the Integrated LBL Mine lease area within a period of 6 months.

Observation and deliberation of the EAC:

21. Committee after deliberations noted the following:

i. The instant proposal is for grant of environment clearance to M/s Mahanadi Coalfields Ltd. for Integrated Lakhanpur Belpahar Lilari Opencast Project (increase in production capacity from 40 MTPA to 48 MTPA, with decrease in ML area from 4399.246 Ha to 4257.606 Ha), located in IB Valley Coalfield, Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha. The proposal is for expansion in production capacity by 20% (1st Phase) as per Ministry's OM dated 11.04.2022.

ii. Ministry has previously granted EC for the said project vide letter dated 15.01.2024 for the production capacity of 40 MTPA within the ML area of 4399.246 Ha by amalgamating the 3 mines namely Lakhanpur, Belpahar and Lilari Opencast mines. Further amended the same vide letter dated 13.08.2024 and 30.05.2025.

iii. The above EC is under implementation and the proponent has achieved the production capacity of 39.99 MTPA in the FY 2024-25.

iv. MoEF&CC has issued an OM on 11.04.2022 to facilitate all applications seeking prior EC for modernization/expansion with increase in production capacity up to 50% within the existing premises/ mine lease area, without any additional land acquisition. Through this OM, Ministry has provided guidelines for availing expansion up to 50% of the original EC capacity without Public Hearing in two stages (0-20% & 20-40%). Public Consultation (written comments) shall be required for third stage i.e., 40-50% expansion.

v. The ML area is located within the Severely Polluted Area having CEPI score of 66.35. PP submitted the compliance of the additional conditions as per EC letter dated 15.01.2024 stipulated for the project being in SPA.

vi. The EAC 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. It is observed that there is Hirakund reservoir Ramsar site at a distance of approx. 2.21 km and backwaters of Hirakund reservoir (wetland) at a distance of approx. 0.86 km. Committee also observed that, the PP is also using surface water from the backwaters of the Hirakund reservoir and an

agreement for the same has been signed to acquire the water through OPGC pipeline and the same is valid till 30.11.2025. Committee opined that, control measures shall be taken for the protection of the wetland and the Ramsar site, in coordination with the State government. An action plan and its compliance in this regard shall be prepared and submitted to the Ministry's RO, along with the six monthly compliance report.

vii. In the instant proposal the ML area is being reduced from 4399.246 Ha to 4257.606 Ha. The 141.64 Ha of the area being reduced is non-forestland and non-coal bearing zone and the same will be utilized for establishing coal to ammonium nitrate plant of MCL. Committee also observed that the coal block in which the said mine is located is of 5669.72 Ha and the remaining land will be considered for the future expansion of the new projects.

viii. Total ML area is 4257.606 Ha. This involves the forest land of 958.695 Ha. PP has obtained Stage – II forest clearance on the entire forestland involved in the said project. Committee observed that the total broken forestland as on 31.03.2025 is 276.089 Ha and there is no violation of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980.

ix. 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. A Site-Specific Wildlife Conservation Plan has been approved by PCCF (WL), Odisha vide letter no. 8369 dated 22.07.2024 for an amount of Rs. 3250.72 lakhs. Payment of Rs. 3250.72 lakhs has been paid on 30.08.2024. However, as per the certified compliance report obtained by the PP, it is observed that, the implementation of the site specific wildlife conservation plan is under process and PP submitted that the implementation report will be furnished along with the six-monthly EC compliance report. Committee opined that the same shall be submitted along with the next six-monthly compliance report to the Ministry's RO.

x. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MCL Board vide letter MCL/SBP/CS/BD-281/Exct/2025/14879, dated 08.07.2025. Method of mining proposed to be carried out is opencast mining using combined mining system deploying shovel dumper combination and Surface Miner.

xi. Total mineable reserve as per the mine plan as on 01.04.2025 was 1334.52 MT and the balance mineable reserve as on 01.04.2025 is 1262.86 MT. Percent of extraction is 94.63%. The average grade of coal is G-12. Life of mine is 20 years (as on 01.04.2025).

xii. Committee further deliberated on the method of transportation proposed for the said project and observed that coal from in-pit to surface is proposed to be transported through dumpers and tippers, from surface to siding the same is being transported through conveyor and tippers through internal CT roads and further to consumers through railway. For the time being out of the 40 MTPA as per the existing EC, 33.5 MTPA is being transported through rail and remaining 6.5 MTPA is being transported through road. After completion of silo and closed conveyor, 4 MTPA out of the 6.5 MTPA will be transported through road only to the local consumers and remaining 2.5 MTPA will be transported through rail. For the expansion project of 48 MTPA, PP has submitted that, 38 MTPA will be transported the combination of rail, road and conveyor and remaining 10 MTPA will be transported by road to the local small consumers within a distance of 25-30 km. Out of this 6 km is the stretch of MCL's dedicated coal transportation road and remaining is the public road. Committee opined that PP shall submit the mitigation measures or the same and comply with all the measures submitted. Committee also opined that, PP shall take adequate measures to control the pollution being done due to road transportation of coal and PP shall carry out regular maintenance of the potholes on roads, repair and maintenance of roads, scrapping of material fallen on roads, and removal of scraps from mining areas. Along with this, PP shall make sure that all the pollution control equipments are in good working condition and maintenance of those equipments are regularly carried out. Committee also opined that PP shall develop thick plantation with native and fruit bearing species on both the sides of the coal transportation road.

xiii. Committee deliberated on the baseline data submitted by the PP and observed that, the baseline data has been collected during March – May 2025. All the parameters are found to be within limits. However, in the buffer zone, Barihapali village has the values of PM10, though within limits but on the higher side. Committee opined that, PP shall take additional adequate measures to bring down the values of PM10 in the said village and measures to be taken shall be submitted by the PP. Committee also observed that there are 2 CAAQMS already existing in the buffer zone of the said mines. Committee opined that 2 additional CAAQMS shall be installed, one each in the core zone and the buffer zone, by December 2025. Committee also observed that as per the CCR obtained by the PP, Continuous Online Water Quality Monitoring System is yet to be installed. PP committed to install the same by December 2025.

xiv. PP submitted that the total water required for the project is 14280 KLD. Source of water is Mine Seepage Water, accumulated rainwater & backwater of Hirakud reservoir. Water usage quantity: Industrial use: 10920 KLD; Domestic use: 3360 KLD. NOC from CGWA obtained vide NOC no. CGWA/NOC/MIN/ORIG/2020/9248, dtd 09.12.2020 in respect of Lakhanpur OCP for which renewal is awaited & NOC no. CGWA/NOC/MIN/REN//1/2025/10603, dtd. 28.01.2025 in respect of Belpahar OCP which is valid till 25/11/2026. Potable water requirements are currently met through the Integrated Water Supply Scheme (IWSS) Hirakud Backwater reservoir as per the agreement communicated in letter no. MDD/10690 (WE) dtd 25.09.2023, by Superintendent Engg, Main Dam, Burla (Sambalpur) which is valid till 30.11.2025. Further, PP submitted that no water body is proposed to be diverted. Committee observed that there is no NoC obtained for the integrated Lakhanpur Belpahar Lilari Opencast Project. The groundwater NoC has been obtained for the 2 mines, namely Lakhanpur and Belpahar. Lilari mine is closed as on date. Committee opined that the PP shall obtain a fresh CGWA NoC in the name of Integrated Lakhanpur Belpahar Lilari Opencast Project.

xv. Total electricity requirement is 30 MW. Presently Lakhanpur, Belpahar & Lilari opencast projects existing substations are receiving power at 33 kV, through four numbers single circuit 33 kV overhead line, drawn from 132/33 kV Jorabaga substation of MCL.

xvi. Committee deliberated on the PH action plan of the submitted by the PP for the Public hearing held on 06.12.2021 and the expenditure till date. Committee observed that the total budget allocated for the same was Rs. 124580 Lakhs, out of which Rs. 4050.4 Lakhs has already been spent. PP has submitted the PH action plan for the next 5 years with the budget of Rs. 12052.6 Lakhs. Committee opined that the same shall be implemented efficiently in a time bound manner. Committee also observed that the PH budget also included expenditure to be incurred for R&R, Silo/ conveyor and road construction.

xvii. Further, Committee deliberated on EMP budget submitted by the PP and observed that, the capital cost for environmental protection measures is proposed as Rs. 56349.61 Lakhs and the annual recurring cost towards the environmental protection measures is proposed as Rs. 5837 Lakhs/Annum. Committee opined that the same shall be efficiently implemented in a time – bound manner.

xviii. Committee further deliberated on the plantation developed by the PP till date and observed that, existing green cover has been developed in 372.455 ha area which is about 8.75 % of the total mine lease area of 4257.606 ha with total sapling of 931138 Trees. Proposed green cover will be developed in 3386.964 ha which is about 72.98 % of the total mine lease area. Thus, total of 3759.419 ha area (88.3% of ML area) will be developed as green cover. A 7.5 m wide greenbelt, consisting of at least 3 tiers around mine boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 93,98,548 saplings will be planted and nurtured in 3759.419 hectares in 20 years. Committee further observed in the CCR obtained by the PP that, greenbelt is yet to be developed. PP submitted that total perimeter of the mine lease area of the Integrated project is 34 Km out of which natural vegetation exists for a length of 15.20 Km which will be kept undisturbed. The remaining area will be developed as a Greenbelt consisting of 3-tier plantation of width not less than 7.5 m all along the mine lease area by June 2027 for an approximate cost of Rs 6.5 Crs including incentives @Rs. 50/Plant to local villagers for maintenance and nurturing of plants. Committee opined that the same shall be developed in a time bound manner.

xix. Committee deliberated on the rehabilitation and resettlement issues of the ML area and observed that a total of 6492 PAFs were involved for R&R during the initial R&R of the project. Total 662 PAFs has been provided settled, 1500 PAFs have been provided cash in lieu of plot, 2387 PAFs have been provided employment and 88 PAFs have been provided cash in lieu of employment. Nos of PAFs under scrutiny and verification stage for resettlement are 1855. Committee opined that the same shall be expedited at the earliest.

xx. Committee observed that there is violation case related to Belpahar OCM has been registered under Sections 15 and 16 of the Environment (Protection) Act 1986, for production exceeding the approved EC capacity from 1995 to 2004 and 2007-2012. The case, referenced as 2(C) CC No-170 of 2013, is pending trial before the Sub-Divisional Judicial Magistrate, Jharsuguda in Odisha. The case is pending for trial before Sub Divisional Judicial Magistrate (SDJM), Jharsuguda. Next date of hearing is still awaited. Committee opined PP shall abide by all orders and judicial pronouncements, made from time to time by Sub-Divisional Judicial Magistrate, Jharsuguda in case no. 170 of 2013.

xxi. Committee deliberated on the certified compliance report obtained by the PP from Regional Office; Bhubaneswar vide letter no: 101-1127/25/EPE/194 dtd. 27.03.2025 in the name of Integrated Lakhanpur Belpahar Lilari Project of M/s. Mahanadi Coalfields Limited. Apart from the partial compliances discussed in the points above, Committee opined that PP shall also comply with the same in the following manner and action taken report for the same has been submitted by the PP to the Ministry's Regional Office as asked by the EAC.

a. Project proponent shall take the progressive actions as per the outcomes of socio-economic study to resolve the issues related to Drinking Water Supply, Education, Health Facility, Roads, lighting and illumination, issues of Dust, Noise & Vibration etc as per the action plan submitted. Compliance of the same shall be submitted to the Ministry's RO within six months.

b. Plantation of 1 Lakhs sal trees with geotagging shall be completed within 5 years from the date of grant of EC, in consultation with the State Forest Department.

c. Project proponent shall complete the installation of solar lights in the nearby villages in the following manner, as committed:

S. No.	Places	Quantity	Amount (Rs.)	Timeline
1	Soldia	18 nos. Solar Lights, 06 nos. Solar Submersible Pump	25.40 Lakhs	Completed on Dec 2024
2	Kudaloi	30 nos. Solar Lights	12.00 Lakhs	NOC has been received from District administration. Site Visit for preparation for planning and estimation has been done. The proposal is in approval stage and the work will be completed by Jan 2026.
3	Mauliberena	04 nos. Solar Lights	1.60 Lakhs	
4	Piplikani	15 nos. Solar Lights	6.00 Lakhs	
5	Bandhbahal	20 nos. Solar Lights	8.00 Lakhs	
6	Dalgaon	15 nos. Solar Lights	6.00 Lakhs	
7	Along the road used for transportation of minerals		30.00 Lakhs	
8	Ground mounted solar power plant of 10 MW		4873	February 2026
Total			4962 Lakhs	

d. Project proponent shall install bio-toilets as per the following action plan and budget submitted:

S. No.	Locations of Bio-Toilets	Budget in Rs. Lakh	Timeline of work completion
1	Udajahajpada Gumadera,	13.50	Oct-Dec 2025
2	Jhandapada Gumadera,	13.50	Oct-Dec 2025
3	Gwalapada W. no. 8 Belpahar,	13.50	Oct-Dec 2025
4	Gwalapada W. no. 13 Belpahar,	13.50	Oct-Dec 2025
5	Mahijore, Belpahar,	13.50	Oct-Dec 2025
6	Mahijore Uparpada Belpahar and	13.50	Oct-Dec 2025
7	Dhauramunda Belpahar.	13.50	Oct-Dec 2025
Total		94.50	

e. The study report of NIT Rourkela for scientific study of dumping of fly ash/Mixing of fly ash with 08 in the voids of the running/active mines of MCL along with its viability, safety and environmental impact assessment in Int LBL OCP of MCL shall be completed within 6 months and the same shall be submitted to the Ministry's Regional Office along with the six-monthly compliance report along with the compliance of the recommendations of the same.

xxii. Committee opined that PP shall align its activities with the sustainable development goals.

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

xxiv. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

22. Based on the discussions held and the documents submitted, the EAC recommended the instant proposal for grant of Environment Clearance for the “*Integrated Lakhanpur Belpahar Lilari Opencast Project (increase in production capacity from 40 MTPA to 48 MTPA, with decrease in ML area from 4399.246 Ha to 4257.606 Ha), by M/s Mahanadi Coalfields Limited, located in IB Valley Coalfield, Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha*” under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions in addition to the general/Standard EC conditions (**Annexure-I**).

23. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environmental Clearance to **M/s. Mahanadi Coalfields Limited** for “*Integrated Lakhanpur Belpahar Lilari Opencast Project (increase in production capacity from 40 MTPA to 48 MTPA, with decrease in ML area from 4399.246 Ha to 4257.606 Ha), located in IB Valley Coalfield, Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha*” subject to compliance of the Specific Environmental safeguard Conditions in addition to the standard EC conditions (**Annexure-I**).

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

25. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

26. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

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

28. General Instructions:

(i) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.

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

(iii) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

(iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate

account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

(v) 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.

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

(vii) Validity of EC is as per the provision of EIA Notification, 2006 and its subsequent amendment.

29. This issue with an approval of the Competent Authority.

Yours faithfully,
(Sundar Ramanathan)
Scientist 'F'
Tel: 011- 20819378
Email- r.sundar@nic.in

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Deputy Director General of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandershekharpur, Bhubaneswar- 751023 (Odisha).
3. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar (Odisha).
4. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
5. The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneswar - 751012 (Odisha).
6. District Collector, Jharsuguda, Government of Odisha.
7. PARIVESH Portal

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	Project proponent shall prepare an action plan within six months of the grant of this EC, in coordination with the state government to implement the control measures for the protection of Hirakund backwaters and the Hirakund reservoir situated at a distance of approx. 0.86 km and approx. 2.21 km respectively from the boundary of the ML area.
1.2	Project proponent shall submit the implementation report of the site – specific wildlife conservation plan to the Ministry’s Regional Office along with the six-monthly compliance report.
1.3	Out of the 48 MTPA of coal production, 31.15 MTPA shall be transported through rail mode only through the railway siding facility established within the ML area and 9.35 MTPA of coal through the road followed by the railway dispatch situated within the ML area as committed. The

S. No	EC Conditions																													
	transportation of 40.5 MTPA shall be restricted within the mine lease area only as committed. The remaining 7.5 MTPA of coal shall be transported by road through dumpers covered with Tarpaulin to the local consumers up to the distance of 25 – 30 km till 31/12/2027.																													
1.4	Project proponent shall augment the dedicated in-pit conveyor with silo loading system from 20 MTPA to 25 MTPA by 31.12.2027. Thereafter, the entire coal of 48 MTPA shall be transported by rail cum conveyor belt only except 10% of the total production of coal, i.e., 4.8 MTPA is allowed to be transported through road through dumpers covered with Tarpaulin to the local consumers up to the distance of 25 – 30 km.																													
1.5	Proponent shall carryout regular maintenance of the potholes on roads, repair and maintenance of roads, scrapping of material fallen on roads, and removal of scraps from mining areas. Along with this, PP shall make sure that all the pollution control equipments are in good working condition and maintenance of those equipments are regularly carried out.																													
1.6	<p>Project proponent shall take the following control measures in the Barihapali village, as committed:</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Control Measures</th> <th>Quantity (Existing)</th> <th>Quantity (Proposed)</th> <th>Budget Estimate Proposed (Rs. in Cr)</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Mobile water tankers</td> <td>38</td> <td>05</td> <td>10.00</td> <td>May 2026</td> </tr> <tr> <td>3</td> <td>Mechanical Road Sweeper</td> <td>03</td> <td>01</td> <td>2.00</td> <td>Mar 2026</td> </tr> <tr> <td>5</td> <td>RLS/SILO/CONVEYOR</td> <td>10 MTPA</td> <td>20 MTPA</td> <td>473.09</td> <td>Dec 2027</td> </tr> </tbody> </table>						S. No	Control Measures	Quantity (Existing)	Quantity (Proposed)	Budget Estimate Proposed (Rs. in Cr)	Timeline	1	Mobile water tankers	38	05	10.00	May 2026	3	Mechanical Road Sweeper	03	01	2.00	Mar 2026	5	RLS/SILO/CONVEYOR	10 MTPA	20 MTPA	473.09	Dec 2027
S. No	Control Measures	Quantity (Existing)	Quantity (Proposed)	Budget Estimate Proposed (Rs. in Cr)	Timeline																									
1	Mobile water tankers	38	05	10.00	May 2026																									
3	Mechanical Road Sweeper	03	01	2.00	Mar 2026																									
5	RLS/SILO/CONVEYOR	10 MTPA	20 MTPA	473.09	Dec 2027																									
1.7	Project proponent shall install 2 additional CAAQMS one each in the core zone and the buffer zone, by December 2025, as committed.																													
1.8	Project proponent shall install Continuous Online Water Quality Monitoring System by December 2025, as committed.																													
1.9	Project proponent shall take an EC amendment to seek an amalgamated EC for the washery within the ML area, along with the Integrated Lakhanpur Belpahar Lilari Opencast Project.																													
1.10	After preparation of the CHR (Comprehensive Hydrogeological Report), project proponent shall obtain the ground water clearance for the Integrated Lakhanpur Belpahar Lilari Opencast Project and shall surrender the individual NoCs of Lakhanpur & Belpahar.																													
1.11	The budget proposed for Public Hearing is Rs. 12052.6 Lakhs. The budget proposed shall be kept in a separate account and shall be audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of revalidation of EC. PP shall submit the progress report regarding the implementation of the action plan to concerned RO along with the six-monthly compliance report.																													
1.12	Project proponent shall implement the protective measure proposed in Environment Management Plan (EMP) in a time-bound manner. The budget earmarked for the same is Rs 56349.61 Lakhs (Capital) and Rs 5837 Lakhs per annum (recurring) 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 for the activities carried out during the previous																													

S. No	EC Conditions				
	year.				
1.13	Project proponent shall comply with following partially complied conditions of the previous ECs, as committed in a time bound manner:				
	a. Project proponent shall take the progressive actions as per the outcomes of socio-economic study to resolve the issues related to Drinking Water Supply, Education, Health Facility, Roads, lighting and illumination, issues of Dust, Noise & Vibration etc as per the action plan submitted. Compliance of the same shall be submitted to the Ministry's RO within six months.				
	b. Plantation of 1 Lakhs sal trees with geotagging shall be completed within 5 years from the date of grant of EC, in consultation with the State Forest Department.				
	c. Project proponent shall complete the installation of solar lights in the nearby villages in the following manner, as committed:				
	S. No.	Places	Quantity	Amount (Rs.)	Timeline
	1	Soldia	18 nos. Solar Lights, 06 nos. Solar Submersible Pump	25.40 Lakhs	Completed on Dec 2024
	2	Kudaloi	30 nos. Solar Lights	12.00 Lakhs	NOC has been received from District administration. Site Visit for preparation for planning and estimation has been done. The proposal is in approval stage and the work will be completed by Jan 2026.
	3	Mauliberena	04 nos. Solar Lights	1.60 Lakhs	
	4	Piplikani	15 nos. Solar Lights	6.00 Lakhs	
	5	Bandhbahal	20 nos. Solar Lights	8.00 Lakhs	
	6	Dalgaon	15 nos. Solar Lights	6.00 Lakhs	
	7	Along the road used for transportation of minerals		30.00 Lakhs	October 2025
	8	Ground mounted solar power plant of 10 MW		4873	February 2026
	Total			4962 Lakhs	
	d. Project proponent shall install bio-toilets as per the following action plan and budget submitted:				
S. No.	Locations of Bio-Toilets	Budget in Rs. Lakh	Timeline of work completion		
1	Udajahajpada Gumadera,	13.50	Oct-Dec 2025		
2	Jhandapada Gumadera,	13.50	Oct-Dec 2025		
3	Gwalapada W. no. 8 Belpahar,	13.50	Oct-Dec 2025		
4	Gwalapada W. no. 13 Belpahar,	13.50	Oct-Dec 2025		
5	Mahijore, Belpahar,	13.50	Oct-Dec 2025		
6	Mahijore Uparpada Belpahar and	13.50	Oct-Dec 2025		
7	Dhauramunda Belpahar.	13.50	Oct-Dec 2025		
Total		94.50			
e. The study report of NIT Rourkela for scientific study of dumping of fly ash/Mixing of fly ash with 08 in the voids of the running/active mines of MCL along with its viability, safety and environmental impact assessment in Int LBL OCP of MCL shall be completed within 6 months and the same shall be submitted to the Ministry's Regional Office along with the six-monthly compliance report along with the compliance of the recommendations of the same.					

S. No	EC Conditions
1.14	Project proponent shall develop total of 3759.419 ha area (88.3% of ML area) plantation by the end on mine life, as committed. A 7.5 m wide greenbelt, consisting of at least 3 tiers around mine boundary shall be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species shall be planted with a density of 2500 trees per hectare. Total no. of 93,98,548 saplings shall be planted and nurtured in 3759.419 hectares in 20 years. Apart from this, PP shall develop a Greenbelt consisting of 3-tier plantation of width not less than 7.5 m all along the mine lease area by June 2027 for an approximate cost of Rs 6.5 Crs including incentives @Rs. 50/Plant to local villagers for maintenance and nurturing of plants.
1.15	Rehabilitation and Resettlement of 1855 PAFs, which are under the scrutiny and verification stage shall be completed at the earliest.
1.16	Project proponent shall abide by all orders and judicial pronouncements, made from time to time by Sub-Divisional Judicial Magistrate, Jharsuguda in case no. 170 of 2013.
1.17	Project Proponent shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health. PHCs & CHCs within the core and buffer zone shall be supported with adequate budget over 5 years, for improving facilities for enhancing quality of public health service. Compliance status in this regard shall be submitted along with the six-monthly compliance to the concerned Regional Office of MoEF&CC.
1.18	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.
1.19	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six-monthly compliance report being submitted by PP.
1.20	Water shed/Natural drainage shall be carefully managed so that flow of water should go down side in the main streams/nallah.
1.21	PP shall carry out Occupational Health study by the Central Institute of Mining and Fuel Research (CIMFR) to aware the employees, preventing injury, and reducing the health issues in the workplace. All the recommendations of the study shall be complied by the proponent and project for next phase of expansion shall be submitted only after the compliance of the same.
1.22	Third-party audit (by NEERI/CIMFR/IIT/NITs) for air & water quality shall be carried out annually to keep a check on the same. PP shall implement the recommendations of the audit and submit the outcome of the audit to the concerned RO of MoEF&CC.

S. No	EC Conditions
1.23	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 Greenbelt development. The action in this regard shall be submitted concerned RO in six monthly compliance report.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project.
1.2	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.3	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.
1.4	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.
1.5	Validity of Environment Clearance is as per life of the mine mentioned in EC letter or 30 years as per EIA Notification, 2006 and its amendments therein

2. Air Quality Monitoring And Mitigation Measure

S. No	EC Conditions
2.1	Project proponent shall obtain requisite consent from State Pollution Control Board for 48 MTPA coal mining.
2.2	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, SO ₂ and NO _x . 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.
2.3	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
2.4	Effective control measures such as regular water sprinkling/rain gun/ Fog cannon /mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality

S. No	EC Conditions
	parameters conform to the norms prescribed by the Central/State Pollution Control Board.
2.5	Major approach roads shall be black topped and properly maintained.
2.6	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
2.7	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.

3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	PP shall take approval from the CGWA/ Competent Authority prior to commencement of mining operations.
3.2	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 amended from time to time by the Central Pollution Control Board.
3.3	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.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.
3.4	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.
3.5	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
3.6	Industrial wastewater from coal handling plant and mine 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 thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic wastewater.
3.7	Industrial effluent and domestic wastewater shall be treated in the Effluent treatment Plant (ETP) and Sewage Treatment Plant (STP). After treatment, treated water shall be reused for plantation.

4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	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.
4.2	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.

5. Mining Plan

S. No	EC Conditions
5.1	Project proponent shall obtain star rating as per the guidelines of Ministry of Coal.
5.2	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
5.3	No change in mining method, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
5.4	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
5.5	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

6. Land Recalvation

S. No	EC Conditions
6.1	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
6.2	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
6.3	The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the “during mining”/”post mining” land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

S. No	EC Conditions
6.4	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
6.5	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.

7. Public Hearing And Human Health Issues

S. No	EC Conditions
7.1	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.
7.2	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.
7.3	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.
7.4	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
7.5	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
7.6	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

8. Corporate Environment Responsibility

S. No	EC Conditions
8.1	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
8.2	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

9. Miscellaneous

S. No	EC Conditions
9.1	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.
9.2	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.
9.3	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.
9.4	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.
9.5	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.
9.6	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
9.7	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9.8	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.
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.

S. No	EC Conditions
9.10	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.
9.11	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
9.12	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
9.13	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.
9.14	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.

