



सत्यमेव जयते

File No.: IA-J-11015/15/2019-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 13/08/2024



To,

Sh. R P Gupta
M/s Mahanadi Coalfields Limited (MCL)
Office of the General Manager, Lakhanpur Area, MCL, PO Bandhabahal Colony, Jharsuguda Odisha ,
Bandhabahal, JHARSUGUDA, ODISHA, Lakhanpur, 768211
E-mail: integratedlbl2019@gmail.com

Subject: Expansion and amalgamation of three mines Lakhanpur, Belpahar and Lilari Open Cast mine with increase in production capacity from 32.5 MTPA to 40.0 MTPA within mine lease area of 4399.246 ha by M/s Mahanadi Coalfields Limited (MCL) located in IB Valley Coalfield, Tehsil Lakhanpur District Jharsuguda (Odisha) – Grant of Amendment in Environmental Clearance – regarding.

Sir/Madam,

This is with reference to your online application vide proposal No. IA/OR/CMIN/471280/2024 dated 14/06/2024 along with CAF (Part A, B and C) seeking amendment in Environment Clearance accorded by the Ministry vide letter no. J- IA-J-11015/15/2019-IA. II (M) dated 15.01.2024, under the provisions of the EIA Notification, 2006 for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24A0101OR5249946A
(ii) File No.	IA-J-11015/15/2019-IA-II(M)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Integrated Lakhanpur Belpahar Lilari Project
(viii) Location of Project (District, State)	JHARSUGUDA, ODISHA
(ix) Issuing Authority	MoEF&CC
(x) EC Date	15/01/2024
(xi) Applicability of General Conditions	NO

(xiii) Status of implementation of the project

2. The proposal was considered by EAC (Coal) in its meeting held during July 1-2, 2024. The project activity is listed at schedule no. **1(a) - Mining of minerals under Category “A”** of the schedule of the EIA Notification, 2006. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <https://parivesh.nic.in>

3. The Environment clearance for the project was granted under EIA Notification, 2006 vide Ministry’s letter no. IA-J-11015/15/2019-IA. II (M) dated 15.01.2024 for expansion and amalgamation of three mines Lakhanpur, Belpahar and Lilari Open Cast mine with increase in production capacity from 32.5 MTPA to 40 MTPA within mine lease area of 4399.246 ha.

4. The company has proposed an amendment of Specific Condition no. 1.3, 1.5, 1.9, Additional Condition Specific no. 1 and Corrigendum in EC as from “32.5 MTPA to 40.0 MTPA” to “32.3 MTPA to 40.0 MTPA” of EC dated 15.01.2024 as shown below-

Specific/ General Condition No.	Details of Conditions	Amendment Sought	Justification																		
Specific condition no. 1.3	In addition to the existing facility for 10 MTPA mechanized transportation system, PP shall install dedicated in-pit belt conveyor for 15 MTPA with silo loading system till railway siding for transportation of 100% of extracted coal through rail within six months of grant of EC. No road transportation shall be allowed by State Government. Accordingly, SPCB should grant the consent to operate.	In addition to the existing facility for 10.0 MTPA mechanized transportation system, PP shall install dedicated in-pit belt conveyor for 20 MTPA with silo loading system till railway siding for transportation of extracted coal through rail & till such time minimum coal shall be transported by road.	<p>As per the approved Mining Plan of Integrated Lakhanpur-Belpahar-Lilari OCP it was proposed to dispatch 30.0 MTPA of coal through SILO and conveyor out of which 10.0 MTPA is already operational, 3.5 MTPA through MGR and 6.5 MTPA through Road sale.</p> <p>The same has also been mentioned in page 4 of EC letter under section “Coal transportation”</p> <p align="center">Quote from EC letter dt. 14-01-2024</p> <p><i>Coal Transportation: The coal will be dispatched through rail and road mode.</i></p> <ul style="list-style-type: none"> · <i>Out of the total 40.0 MTPA of coal, 10.0 MTPA of coal will be transported by pipe conveyors to the washery from receiving hoppers towards north. After washing, washed coal will be transported by conveyors to silo for final dispatch by rail.</i> · <i>For 20.0 MTPA ROM coal, receiving hoppers are proposed near southern entry of Central Quarry, which are also near to South Quarry exit. Coal will be transported by conveyors through over-ground bunker to two silos (20 MTPA) for rapid loading on rail.</i> · <i>And 3.5 MTPA coal will be dispatched to OPGC by rail from sidings and balance 6.5 MTPA will be dispatched locally to nearby customers</i> <p align="center">Unquote</p> <p align="center">Existing Coal 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 align="center">1</td> <td align="center">10.0</td> <td align="center">Pipe conveyor, washery and rail Siding 6 & 7</td> </tr> <tr> <td align="center">2</td> <td align="center">20.0</td> <td align="center">By rail Siding no. 3, 6 & 7 within Mine Lease</td> </tr> <tr> <td align="center">3</td> <td align="center">6.5</td> <td align="center">Local sale by road</td> </tr> <tr> <td align="center">4</td> <td align="center">3.5</td> <td align="center">To OPGC by Rail through Charla Siding within Mine Lease</td> </tr> <tr> <td align="center">Total</td> <td align="center">40.0</td> <td></td> </tr> </tbody> </table> <p align="center">Proposed Coal Dispatch Arrangement:</p>	S. No.	Coal in MTPA	Dispatch Medium	1	10.0	Pipe conveyor, washery and rail Siding 6 & 7	2	20.0	By rail Siding no. 3, 6 & 7 within Mine Lease	3	6.5	Local sale by road	4	3.5	To OPGC by Rail through Charla Siding within Mine Lease	Total	40.0	
S. No.	Coal in MTPA	Dispatch Medium																			
1	10.0	Pipe conveyor, washery and rail Siding 6 & 7																			
2	20.0	By rail Siding no. 3, 6 & 7 within Mine Lease																			
3	6.5	Local sale by road																			
4	3.5	To OPGC by Rail through Charla Siding within Mine Lease																			
Total	40.0																				

Sl. No.	Coal in MTPA	Dispatch Medium	Status/ Timeline
1a	10.0	Pipe conveyor, washery	In operation
1b		SILO Phase-I (Physical Progress-98.20%, Financial Progress-96.44%).	By 31.07.2024
1c		Rail line connectivity for SILO is under construction and requires Stage-II forest clearance	By 30.06.2024 ^{\$}
2	20.0	By conveyor and SILO Phase II	By 14.05.27 ^{\$}
3	4.0	Local sale by road through ATLS	By 30.06.25*
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*
<p>^{\$}Silo and rail for 20.0 MTPA can be constructed only after obtaining Stage-II Forest Clearance.</p> <p>* Further the 6.5 MTPA coal dispatch through road shall be curtailed to 4.0 MTPA which will be done through Automatic Truck Loading system and rest 2.5 MTPA will be dispatched through railway siding 6&7.</p> <p>From above table it can be observed that in addition to the existing 10.0 MTPA mechanized evacuation system, the project is in the process of developing 20.0 MTPA belt and SILO loading system by May'27 and 4.0 MTPA Automatic Truck Loading System (ATLS) by June'25.</p>			
Specific condition no. 1.5	PP needs to avoid further external dumping over existing OB of Lakhanpur OCP and Belpahar OCP and their re-handling too shall be avoided. Mine shall be modified accordingly.	PP needs to avoid further external dumping over existing OB of Lakhanpur OCP and Belpahar OCP and only re-handling of Lakhanpur OB dump shall be allowed to extract lower seam.	<p>In the proposed project there is no additional external dumping, all the OB produced will be dumped internally. However, re-handling of existing Lakhanpur OB dump is required to extract lower seams namely Rampur and IB seam (approx. 450 Mt) coal. Earlier only top seam named Lajkura has been extracted in Lakhanpur OCP. Thus, re-handling of the existing OB of Lakhanpur is absolutely essential for conservation of coal resources.</p> <p>After re-handling of OB and working of lower seams integration of mines is possible. Progressive backfilling will be done & the same will be technically & biologically reclaimed permanently, no further land degradation will be done.</p>
Specific condition no. 1.9	PP shall start backfilling the existing pit in place of increasing the height of OB dump or creation of extra spaces for another dump area.	PP shall start backfilling within mined out void and avoid creation of another dump area	<p>In proposed mine the average stripping ratio during last 5 years was 1.76 cum/t (OB/Coal). However, in proposed integration to extract the lower seam average stripping ratio will increase to 2.61 cum/t in next 5 years.</p> <p>This increase in stripping ratio will cause much more OB removal in future years. To accommodate this huge OB and avoid any further external dumping existing mine void in Belpahar OC is not sufficient, it is essential to increase the height of internal dump (within excavation).</p> <p>To keep the entire OB internally, it is necessary to raise the dump top level to 90 m above surrounding ground level due to space</p>

			constraints and to avoid additional forest areas for the same.
Additional EC condition no. 1	Transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for 40 MTPA.	Transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for not less than 90% of the coal production.	This is in line with specific condition no. 1.3, from which it can be observed coal dispatch has been planned for 30.0 MTPA through belt and SILO loading system, 4.0 MTPA through ATLS for road sale, 3.5 MTPA to OPGC by Siding within Mine Lease and remaining 2.5 MTPA from sidings within mining lease.
			<p>Apart from this in the EC letter of Expansion and amalgamation of three mines Lakhanpur, Belpahar and Lilari Open Cast mine it is mentioned that increase in capacity would be from 32.5 MTPA to 40.0 MTPA whereas it is 32.3 MTPA to 40.MTPA (22.5 MTPA of Lakhanpur OCP, 9.0 MTPA of Belpahar OCP and 0.8 MTPA of Lilari OCP).</p> <p>So, accordingly a corrigendum in EC may be issued.</p>

Deliberations of the Committee

5. The Committee deliberated on various aspects of the proposal submitted and the presentation made by PP. After detailed deliberation, the Committee noted the following:

i. Proposal is for amendment in Specific Condition no.'s 1.3, 1.5, 1.9, and Additional Specific Condition No. 1 of EC dated 15.01.2024 and accordingly PP applied under Form-4 on Parivesh Portal.

ii. PP also sought correction in production capacity inadvertently mentioned as 32.5 MTPA in place of 32.3 MTPA in EC dated 15.01.2024. The correction is required in Subject, Para no. 2 and Para no. 4 of the said EC. The Committee observed that these are the factual corrections and agreed for the same.

iii. The Committee noted that there are some technical issues in Parivesh Portal related to amendment log and other information, for which PP has raised the ticket TIC-24010710 dated 14.06.2024 but PP has provided the information in its reply dated 07.06.2024.

iv. As per Specific Condition no. 1.3 regarding transportation of 100% of extracted coal through rail; PP submitted that as per the approved Mining Plan of Integrated Lakhanpur-Belpahar-Lilari OCP, it was proposed to dispatch 30.0 MTPA of coal through SILO and conveyor, out of which 10.0 MTPA is already operational and the project is in the process of developing 20.0 MTPA belt and SILO loading system by May'27. Regarding remaining 10 MTPA, PP submitted that 3.5 MTPA is being transported through MGR and 6.5 MTPA is being transported through Road for local sale. PP has proposed to dispatch 36 MTPA through mechanised means and 4 MTPA through road. The Committee asked about the time line for which PP submitted that the complete system will be get ready by 2027. The Committee is of the view that administrative reason such as delay in tendering etc. is not acceptable and PP should expedite the process of mechanised transportation so that the same shall be completed within a period of one year. Further, The Committee suggested that even the 4 MTPA transportation shall be avoided as far as possible from the large capacity mines and the same shall be made available in the local market from the small capacity mines for which installation of belt conveyor, railway siding etc. are not economically feasible. The PP agreed to the same and informed the Committee that they will explore the possibility of the same but at this stage to sustain, the production level; the road transportation may be allowed.

v. As regards Specific Condition no. 1.5 for external dumping over existing OB and re-handling, PP submitted that in the proposed project there is no additional external dumping, all the OB produced will be dumped internally. However, re-handling of existing Lakhanpur OB dump is required to extract lower seams namely Rampur and IB seam (approx. 450 Mt) coal. Earlier only top seam named Lajkura has been extracted in Lakhanpur OCP. Thus re-handling of the existing OB of Lakhanpur is absolutely essential for conservation of coal resources. Integration of both the mines will be possible after re-handling of OB and extraction of lower seam in existing Lakhanpur OCP. Progressive backfilling will be done & the same will be technically & biologically reclaimed permanently, no further land degradation will be done. During the meeting the PP also showed the section view of the mine where re-handling of the dump is required. The Committee deliberated on the same and agreed to allow the re-handling for Lakhanpur OCP only.

vi. For Specific Condition no. 1.9 regarding start backfilling the existing pit in place of increasing the height of OB dump PP submitted that in proposed mine the average stripping ratio during last 5 years was 1.76 cum/t (OB/Coal). However, in proposed integration to extract the lower seam average stripping ratio will increase to 2.61 cum/t in next 5 years. This increase in stripping ratio will cause much more OB removal in future years. To accommodate this huge OB and avoid any further external dumping existing mine void in Belpahar OC is not sufficient, it is essential to increase the height of internal dump (within excavation). To keep the entire OB internally, it is necessary to raise the dump top level to 90 m above surrounding ground level due to space constraints and to avoid additional forest areas for the same. The Committee is of the view that PP shall take necessary precautions as dump height is proposed to be maintained 90m above the ground level. The Committee suggested that PP shall get a study done from reputed institute for the stability of the dump and mitigative measures for any impact on Environment including air quality. The Committee is of the view that dump stabilization should start as soon as possible and not later than 7th year. Further, the dump needs to be biologically reclaimed. The Committee therefore is of the view that the condition can be exempted once the PP submits the desired report and approved mining plan (if required).

vii. As per Additional EC condition no. 1, transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for 40 MTPA. PP submitted that this is in line with specific condition no. 1.3, from which it can be observed coal dispatch has been planned for 30.0 MTPA through belt and SILO loading system, 4.0 MTPA through ATLS for road sale, 3.5 MTPA to OPGC by Siding within Mine Lease and remaining 2.5 MTPA from sidings within mining lease. The Committee is of the view that as discussed above the relaxation may be considered till 31/07/2025.

viii. The Committee also discussed on the reduction of specific diesel consumption for which PP submitted that they are undergoing a project for use of LNG in the dumpers. PP informed that trial is going on and they are able to use it with HSD but facing some issues due to evaporation of LNG. For this project they have retro fitted the kits for the same in the dumpers and trails are going on to resolve the issues. The Committee appreciated the efforts made by the PP. In addition to this PP also submitted that they have also called the manufacturer of electric dumpers to discuss the requirement of PP and feasibility of using the same for the mining operations. The Committee is of the view that the PP shall update the Ministry/EAC about the progress made in this regard.

Recommendations of the Committee

6. After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide letter IA-J-11015/15/2019-IA. II (M) dated 15.01.2024 as mentioned below-

Specific/ General Condition No.	Details of Conditions	Amendment Sought	Recommendation of EAC
Specific condition no. 1.3	In addition to the existing facility for 10 MTPA mechanized transportation system, PP shall install dedicated in-pit belt conveyor for 15 MTPA with silo loading system till railway siding for transportation of 100% of extracted coal through rail within six months of grant of EC. No road transportation shall be allowed by State Government. Accordingly, SPCB should grant the consent to operate.	In addition to the existing facility for 10.0 MTPA mechanized transportation system, PP shall install dedicated in-pit belt conveyor for 20 MTPA with silo loading system till railway siding for transportation of extracted coal through rail & till such time minimum coal shall be transported by road.	Agreed for one year the condition shall be read as: <i>“In addition to the existing facility for 10.0 MTPA mechanized transportation system, PP shall install dedicated in-pit belt conveyor for 20 MTPA with silo loading system till railway siding for transportation of extracted coal through rail & till such time minimum coal shall be transported by road till 31/07/2025.”</i>
Specific condition no. 1.5	PP needs to avoid further external dumping over existing OB of Lakhanpur OCP and Belpahar OCP and their re-handling too shall be avoided. Mine shall be modified	PP needs to avoid further external dumping over existing OB of Lakhanpur OCP and Belpahar OCP and only re-handling of Lakhanpur OB dump shall	Agreed.

	accordingly.	be allowed to extract lower seam.	
Specific condition no. 1.9	PP shall start backfilling the existing pit in place of increasing the height of OB dump or creation of extra spaces for another dump area.	PP shall start backfilling within mined out void and avoid creation of another dump area.	Agreed. The condition shall be read as: <i>“PP shall start backfilling within the mined out void and shall not create another dump area. PP shall submit a study regarding the stability of the dump and its biological reclamation to RO, MoEF&CC within one year and implement its recommendations, till then the height of the dump shall not be more than 60 m above the ground level.”</i>
Additional EC condition no. 1	Transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for 40 MTPA.	Transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for not less than 90% of the coal production.	Agreed. The condition shall be read as: <i>“Transportation of materials by rail/conveyor belt with silo loading facility shall be implemented for 40 MTPA within one year and the coal should not be transported through road after 31/7/2025.”</i>
Correction in production capacity inadvertently mentioned as 32.5 MTPA in place of 32.3 MTPA in EC dated 15.01.2024. The correction in Subject, Para no. 2 and Para no. 4 of the said EC is agreed for the factual corrections and the production figure shall be read as 32.3 MTPA.			

Decision of MoEF&CC

7. Based on the discussion held and documents submitted, the Committee **recommended** the above amendment and correction in EC dated 15.01.2024 granted for the Expansion and amalgamation of three mines Lakhanpur, Belpahar and Lilari Open Cast mine with increase in production capacity from 32.5 MTPA to 40.0 MTPA within mine lease area of 4399.246 ha by **M/s Mahanadi Coalfields Limited (MCL)** located in IB Valley Coalfield, Tehsil Lakhanpur District Jharsuguda (Odisha), subject to the compliance of the additional terms & conditions / specific conditions at **Annexure 1**.

8. The undersigned is directed to inform that Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Coal) hereby decided for amendment in the EC dated 15.01.2024; as detailed in para 6 above subject to the compliance of the additional terms & conditions / specific conditions at **Annexure 1**.

9. All other terms and conditions mentioned in the Environment Clearance letter no. IA-J-11015/15/2019-IA. II (M) dated 15.01.2024 shall remain unchanged.

10. The project proponent shall obtain fresh Environment Clearance in case of change in scope of the project, if any.

11. This issues with the approval of the Competent Authority.

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Additional Principal Chief Conservator 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, Odisha State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII,

Bhubaneswar - 751012 (Odisha).

6. District Collector, Jharsuguda, Government of Odisha.

7. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor bagh Road, New Delhi

8. PARIVESH Portal.

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	<i>PP shall comply with the earlier EC conditions and get the inspection done from RO and submit an ATR within 6 months</i>
1.2	<i>PP shall install sufficient numbers of CAQMS and meteorological stations to monitor the core and buffer zone. PP shall explore the possibility of installation of mobile CAQMS to capture the air quality within the core working zone</i>
1.3	<i>Dump stabilisation should start from 7th year onwards</i>
1.4	<i>The other terms and conditions of earlier granted ECs and EC amendments shall remain the same</i>
1.5	<i>PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report</i>