



ईस्टर्न कोलफील्ड्स लिमिटेड

राजमहल खनि समूह

महाप्रबंधक (प्रभारी) का कार्यालय

धनकुंडा, पोस्ट- बड़ा सिमरा, जिला- गोड्डा, झारखण्ड - 814165

पत्रांक- ईसीएल/राजमहल/मप्र(प्र.)/पर्यावरण/ 868(A)

दिनांक - 24.11.2022

सेवा में,

संयुक्त निदेशक / The Joint Director(s) ,

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

Ministry of Environment, Forest & Climate Change,

Integrated Regional Office

2nd Floor, Headquarter- Jharkhand State Housing Board, Harmu Chowk,

Ranchi, Jharkhand -834002

विषय - राजमहल खुली खदान परियोजना विस्तारित (23.8 MTY) से संबंधित छमाही अनुपालन प्रतिवेदन (अवधि - अप्रैल 2022 से सितम्बर 2022)

महोदय,

Please find enclosed herewith the following statutory reports in prescribed format one in hard copy and one in soft copy (preceding periods: April 2022 to September 2022) in respect of Rajmahal Open Cast Project Expansion (23.8 MTY).

संलग्नक - यथोपरि।

भवदीय,

24/11/2022

महाप्रबंधक(खनन)/क्षेत्रीय प्रबंधक (पर्या.)

राजमहल क्षेत्र, ईसीएल

प्रतिलिपि -

1. सदस्य सचिव, झारखण्ड राज्य प्रदूषण नियंत्रण बोर्ड, राँची - आवश्यक दस्तावेजों के साथ सादर सूचनार्थ ।
2. महाप्रबंधक (पर्यावरण), ईसीएल, बराचक हाउस, आसनसोल - आवश्यक दस्तावेजों के साथ सादर सूचनार्थ ।
3. महाप्रबंधक (प्रभारी), राजमहल खनि समूह, ईसीएल
4. महाप्रबंधक (परिचालन), राजमहल खुली खदान, ईसीएल

Six Monthly Compliance report (Half yearly - End Sept. 2022) of Environment Clearance from Ministry of Environment, Forest & Climate Change, New Delhi in respect of Rajmahal Open Cast Project (23.80 MTPA), E.C.I.

Specific Conditions	
S.No.	Condition
i.	The recommendation is subject to approval of revalidation of previous EC dated 11 th May, 2005.
ii.	EAC desired that the M.o.C may direct CIL subsidiaries to comply the EC/IC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
iii.	The project proponent shall obtain Consent to Establish/Operate from the State Pollution Control Boards for the proposed peak capacity of 23.80 MTPA prior to commencement of the increased production.
iv.	Transportation of coal from Coal Handling Plant shall be through covered trucks.
v.	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
vi.	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
vii.	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.

Compliance

MoEF&CC has accorded approval for Revalidation of Environment Clearance dated 11th May 2005 vide letter no.J 11015/30/2004 IA. II(M) dt. 22nd January 2020.

Conditions of EC/FC/CTO are being strictly complied in a time bound manner.

Consent to Establish and Consent to Operate for peak production capacity of 23.80 MTY has been obtained from JSPCB. **(Annexure-I)**

It is being done with closed conveyor belt and SILO system.

Crusher has been provided with automatic sensor-based mist type sprinklers.
In-pit crusher cum conveyor belt system has mist type sprinklers. **(Photograph-I)**

Sufficient numbers of high efficiency dust suppression system have been provided at input hopper, loading and unloading areas including all the transfer points maintained and operated which are as under:

- 1) Total 14 nos. of Mobile water sprinklers [20 KL(06), 28 KL(06) & 34 KL(02) capacity] have been provided for dust suppression at haul roads.
- 2) Automatic sensor based fine nozzle mist type water sprinklers has been installed at Crushing Hopper.
- 3) 02 nos. of highly efficient mist gun have been installed at Crushing Point.
- 4) Fixed type of water sprinklers has been installed near CHP and en route to RJML railway siding.
- 5.) DSS systems for chutes at crushing point.
- 6.) Sprinkler for SM hopper and crusher hopper at crushing point.
- 7.) Service water line for dust cleaning near crushing point.

A person working in dusty areas is being given adequate training and information on safety and health aspects. They use protective respiratory devices judiciously.

PME is being done to each worker at an interval of five years under occupational health surveillance

Specific Conditions

S.No.	Condition	Compliance
		<p>program as per norms at Central Hospital, Kalla, ECL If it is observed any contractions due to exposure to coal dust will be taken corrective measure, as per need.</p> <p>Periodical Medical Examinations (PME) of workers is being carried out at 5 years interval in which audiometric tests are carried out. Last 5 Year details are as under:- 2018 - 447 2019 - 446 2020 - 443 2021 - 690 2022 - 342 (upto sept 2022)</p>
viii.	<p>Persons of nearby villages shall be given training on livelihood and skill development to make them employable.</p>	<p>People of nearby villages are imparted training on livelihood and skill development which are as under:</p> <ul style="list-style-type: none"> i) Skill Development Centre with ATDC at Rajmahal Area. (Project Cost: 18.8 Lakhs) ii) Operation and maintenance of OPJCC (ITI, Godda) (Photograph-II)
ix.	<p>Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.</p>	<p>Thick green belt of adequate width has been developed to mitigate/ check the dust pollution.</p>
x.	<p>Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.</p>	<p>The treated mine water is being supplied to nearby villages for their irrigation and domestic use. Also, excess mine water after sedimentation is being supplied to the ponds in peripheral villages for domestic and agricultural use of local villagers.</p>
xi.	<p>The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 23.8 MTPA.</p>	<p>NOC for Ground Water Abstraction has been obtained which is valid upto 02/03/2024. (Annexure-II)</p>
xii.	<p>Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.</p>	<p>A person working in dusty areas is being given adequate training and information on safety and health aspects. They use protective respiratory devices judiciously.</p> <p>PME is being done for each worker at an interval of five years under occupational health surveillance program as per norms at Central Hospital, Kalla, ECL, If it is observed any contractions due to exposure to coal dust will be taken corrective measure, as per need.</p> <p>Periodical Medical Examinations (PME) of workers is being carried out at 5 year intervals in which audiometric tests are carried out. Last 5 Year-wise details are as under:- 2018 - 447 2019 - 446</p>

Specific Conditions

S.No.	Condition	Compliance
		2020 – 443 2021 – 690 2022 - 342 (upto sept 2022)
xiii.	A third—party assessment of EC compliance shall be undertaken once in every three years by agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.	It is being followed.
xiv.	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 st May, 2018	CER allocation has been dissolved by MoEF&CC vide OM dated 30.09.2020, Ref. No. F.NO.22-65/2017-IA.III. However, Separate fund is earmarked for environment management measures.
xv.	Compliance of all the non-compliances and partially complied conditions by Regional Office, Ranchi for the project of EC dated 11th May, 2005.	All non-compliances and partially complied conditions as suggested by Regional Office are being complied.
xvi.	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to Villages. There shall be no damages caused to habitation/structures due to blasting activity.	Blasting permission has been obtained from DGMS for conducting mining operations. (Annexure-III)
xvii.	Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	It is being done in a phased manner.
xviii.	The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 1 14 of 2014 in the matter of Common Cause versus Union of India and Ors.	Agreed.

xix.	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commencing after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board	NOC for Ground Water Abstraction has been obtained which is valid upto 02/03/2024. (Annexure-II)
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Specific Conditions

S.No.	Condition	Compliance
xx.	<p>Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly;</p> <p>Also, Occupational health check—ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti-snake-venom including all other paramedical safeguards may be ensured before initiating the mining activities.</p>	<p>Periodical Medical Examinations (PME) of workers is being carried out at 5 year intervals in which audiometric tests are carried out. Last 5 Year-wise details are as under:-</p> <p>2018 - 447 2019 - 446 2020 - 443 2021 - 690 2022 - 342 (upto sept 2022)</p>
xxi.	<p>Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-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".</p>	Agreed.
xxii.	<p>The illumination and sound at night at project sites disturb the Villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the Villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.</p>	It is being followed.
xxiii.	<p>The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.</p>	<p>Full efforts are being made during mining operation for conservation and protection of endangered fauna spotted in the study area in consultation with the forest officials.</p> <p>Action plan for conservation of Endangered Fauna has been prepared and it is being implemented in consultation with concerned Divisional Forest Officer, Godda.</p>
xxiv.	<p>Loading and unloading of coal shall be done with silo loading facility to enhance production and proposed facility should be installed in 1</p>	<p>Silo (2 in Nos.) of capacity 4000t each is already operational. Proposal for additional 10 MTY C.H.P which includes rapid loading system and</p>

Specific Conditions		
S.No.	Condition	Compliance
	year.	construction of an additional silo of capacity 4000t is already in progress.
xxv.	Conditions stipulated during revalidation of EC i.e. letter dated 22 nd January, 2020 is also to be complied.	Conditions stipulated during revalidation of EC i.e. letter dated 22 nd January, 2020 are being complied.
xxvii.	Project proponent shall submit approved Wildlife Conservation Plan within six months i.e. by 30 th September, 2020. PP shall also ensure that all the steps to be undertaken as committed by the project proponent to conserve and protect wildlife, failure to do so may be considered a case of non-compliance of EC conditions.	Action plan for conservation of Endangered Fauna has been prepared and it is being implemented in consultation with concerned Divisional Forest Officer, Godda. it has been approved by PCCF/Chief Wildlife warden, Govt. of Jharkhand.

Standard Conditions		
S.No.	Condition	Compliance
A. Statutory Compliance:		
i)	The project proponent shall obtain forest Clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non—forest purpose involved in the project.	Approval under the Forest (Conservation) Act, 1980 for diversion of total 107.42 ha of forest land for non-forestry purposes has been obtained vide following MOEF&CC letter No: I) 8-303/89—FC dated 26.10.1993 for 17.64 Ha in Phase-I II) 8-7/98-FC dated 10.12.2002 for 20.03 Ha in Phase-II. III) 8-89/2003-FC dated 27.08.2004 for 69.75 Ha in Phase-III.
ii)	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable.
iii)	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule—I species in the study area).	Action plan for conservation of Endangered Fauna has been prepared and it is being implemented in consultation with concerned Divisional Forest Officer, Godda. it has been approved by PCCF/Chief Wildlife warden, Govt. of Jharkhand.
iv)	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.	Consent to Establish and Consent to Operate for peak production capacity of 23.80 MTY has been obtained from JSPCB. (Annexure – I)
v)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	NOC for Ground Water Abstraction has been obtained which is valid upto 02/03/2024. (Annexure-II)

Standard Conditions

S.No.	Condition	Compliance															
vi)	Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	It is being followed as per the Hazardous waste management rule.															
B. Air quality monitoring and preservation:																	
i)	Continuous ambient air quality monitoring station as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM ₁₀ , PM _{2.5} , SO ₂ and NO _x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.	As per the guidelines of JSPCB, Continuous PM ₁₀ analyzer has been installed and connected with JSPCB Server. Installation of CAAQMS is in progress.															
ii)	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25 th 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.	Fortnightly AAQ Monitoring is done by CMPDI (Region – I), Asansol as per the Coal Industry Standards notified vide GSR 742 (E) dated 25 th September, 2000 at 4 stations, in core and buffer zone. The monitoring location of the stations had been decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets, in consultation with the representative of JSPCB, Ranchi. The stations are as under:- <ol style="list-style-type: none"> 1. Mine Dispatch Building. 2. CISF Camp. 3. Urjanagar Hospital. 4. ECL Rest House at Pirpainti Market. Monitoring is carried out on fortnightly basis and submitted regularly to the Regional Office of MoEF, Bhubaneswar once in six months, and to the JSPCB, Ranchi once in every three months and also once in a year with the Environmental Statement. Photo copy of Environmental monitoring report for July'22 (1st fortnight) with AAQ data in microgram per cubic meter for above quarter ending is as follows:- <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Pollutants</th> <th style="text-align: center; border-bottom: 1px solid black;">Min.</th> <th style="text-align: center; border-bottom: 1px solid black;">Max.</th> </tr> </thead> <tbody> <tr> <td>PM_{2.5}</td> <td style="text-align: center;">11.9</td> <td style="text-align: center;">21.0</td> </tr> <tr> <td>PM₁₀</td> <td style="text-align: center;">59.7</td> <td style="text-align: center;">118.6</td> </tr> <tr> <td>SO₂</td> <td style="text-align: center;">BDL</td> <td style="text-align: center;">BDL</td> </tr> <tr> <td>NO_x</td> <td style="text-align: center;">12.8</td> <td style="text-align: center;">19.4</td> </tr> </tbody> </table> Attached as Annexure-IV .	Pollutants	Min.	Max.	PM _{2.5}	11.9	21.0	PM ₁₀	59.7	118.6	SO ₂	BDL	BDL	NO _x	12.8	19.4
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SO ₂	BDL	BDL															
NO _x	12.8	19.4															

Standard Conditions

S.No.	Condition	Compliance
iii)	<p>Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc. shall be carried out in critical areas prone to air pollution (with higher values of PM₁₀/ PM_{2.5}) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.</p>	<p>Transportation of coal is carried out by closed conveyor belt and SILO system with mist sprinkling arrangements.</p> <p>Also Following dust suppression techniques are also in operation:</p> <ol style="list-style-type: none"> 1) Automatic sensor based fine nozzle mist type water sprinklers have been installed at Crushing Hopper. 2) 02 nos. of highly efficient mist gun have been installed at Crushing Point. 3) Fixed type of water sprinklers has been installed near CHP. 4.) DSS systems for chutes at crushing point. 5.) Sprinkler for SM hopper and crusher hopper at crushing point. 6.) Service water line for dust cleaning near crushing point. 7.) Belt conveyors are fully covered to avoid air borne dust. 8.) Wet drilling is operational. <p>Also, Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board. (Photograph-3)</p>
iv)	<p>The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.</p>	<p>It is being strictly followed.</p>
v)	<p>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.</p>	<p>Vehicular emissions are kept under control and are regularly monitored. Vehicles have obtained PUC certificates from authorized pollution testing centres.</p>

vi)	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Following dust suppression techniques are already in operation: 1) Automatic sensor based fine nozzle mist type water sprinklers has been installed at Crushing Hopper. 2) 02 nos. of highly efficient mist gun have been installed at Crushing Point. 3) Fixed type of water sprinklers has been installed near CHP. 4.) DSS systems for chutes at crushing point. 5.) Sprinkler for SM hopper and crusher hopper at crushing point. 6.) Service water line for dust cleaning near crushing point. 7.) Belt conveyors are fully covered to avoid air borne dust. 8.) Wet drilling is operational. (Photograph 3)
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Standard Conditions

S.No.	Condition	Compliance																											
C. Water quality monitoring and preservation:																													
i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25 th September, 2000 and as amended from time to time by the Central Pollution Control Board.	Effluent discharge (mine waste water, workshop effluent) is regularly monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25 th September, 2000 by CMPDIL. Annexure-IV																											
ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.II (M) dated 27 th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	The monitoring data is regularly uploaded on the company's website and display board at the project site at a suitable location. The circular No. J-20012/1/2006-IA.II (M) dated 27 th May, 2009 issued by Ministry of Environment, Forest and Climate Change is also referred in for its compliance.																											
iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEF&CC/RO.	Regular monitoring of ground water level in five designated wells in vicinity of Rajmahal OCP is carried out on quarterly basis by CMPDIL, Asansol. The report is being submitted regularly as desired. The Ground water level for May'22 is given below, <table border="1" data-bbox="770 859 1288 1052"> <thead> <tr> <th>S.No</th> <th>Name of Site</th> <th>Well water level from ground (m)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Hijukitta Village</td> <td>4.00</td> </tr> <tr> <td>2.</td> <td>Lalmatia Chowk</td> <td>2.95</td> </tr> <tr> <td>3.</td> <td>Lohandia Bazar Village</td> <td>4.00</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <table border="1" data-bbox="770 1246 1267 1429"> <thead> <tr> <th>S.No</th> <th>Piezometer Station Code and Location</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>RPZ-1 (Old Workshop / Erection Yard)</td> </tr> <tr> <td>2.</td> <td>RPZ-2 (Lohandiya Panchyat Bhawan)</td> </tr> </tbody> </table>	S.No	Name of Site	Well water level from ground (m)	1.	Hijukitta Village	4.00	2.	Lalmatia Chowk	2.95	3.	Lohandia Bazar Village	4.00										S.No	Piezometer Station Code and Location	1.	RPZ-1 (Old Workshop / Erection Yard)	2.	RPZ-2 (Lohandiya Panchyat Bhawan)
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iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	It is being followed. Monitoring of water quality upstream and downstream of water bodies has been carried out is by CMPDIL, Asansol, which is NABL accredited company. (Annexure- IV)																											

Standard Conditions

S.No.	Condition	Compliance
v)	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	Ground water, excluding mine water, is not used for mining operations. Ponds (15 in Nos.) has been constructed within mine lease area and Rain water harvesting structures (7 in Nos.) has been constructed for conservation and augmentation of ground water resources.
vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilized for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field /habitation/water bodies.	<p>Catch drain are present in the dumps to arrest silt and runoff. Garland drains are provided along the toe of dump for collecting and discharging rain water. Yearly cleaning of the drains is carried out under monsoon preparation.</p> <p>Storm water flowing through garland drains is collected in a pond which is de-silted as and when required. Second stage settling pond has also been developed.</p> <p>The water collected through these drains are utilized for watering the mine areas, roads and firefighting etc.</p> <p>Construction of more catch drains is under progress and will be ready soon.</p> <p>(Photographs 4)</p>
vii)	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	<p>Several Ponds has been constructed within mine lease area and 7 numbers of rainwater harvesting structures has been constructed for conservation and augmentation of ground water resources.</p> <p>Also, Rajmahal OCP do meet the water requirements of nearby needy villages regularly through (i) Water tankers, (ii) Supplying water by borehole pumping and (iii) Channelizing the dewatered supply to village ponds. (iv) Lalmatia Filtration plant (by ECL) of capacity 10,000 GPH is solely to fulfill the drinking water requirements of nearby villages. (Photograph-5)</p> <p>Financial help is also provided on opening of new wells, their maintenance and installation of hand pumps.</p>
viii)	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the	Industrial waste water (workshop and waste water from the mine) is being properly collected and analyzed, regularly and found conforming with the MoEF Schedule - VI Standards for discharge of mine effluents. Analysis results of CHP discharge for July' 2022 are within permissible limit. Quality

Standard Conditions

S.No.	Condition	Compliance
	Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.	report for 4 parameters are as under:- <u>Location : Discharge from CHP</u> pH 7.69 TSS (mg/l) 12.56 TDS (mg/l) 283 Oil & Grease (mg/l) BDL COD (mg/l) 16 (Annexure-IV)
ix)	The water pumped out from the mine, after siltation shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly de-silted particularly after monsoon and maintained properly.	The water pumped out from the mine, is passed through multi-stage settling ponds and sedimentation tank before it is utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. Also, the drains are regularly de-silted particularly after monsoon and maintained properly. (Photographs-6)
x)	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/ rivulet/ pond/ lakes etc. shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.	Hydro-geological report which incorporates drainage plan, has been prepared by CMPDI and is being implemented. It is as per EIA/EMP report.
xi)	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/ riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.	There is no riverine/ riparian ecosystem near the coal mine up to a distance of 5 km.
D. Noise and Vibration monitoring and prevention:		
i)	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with personal protective equipment (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.	To control noise levels within prescribed standards the following steps are being taken :- 1. Noise monitoring is being carried out regularly and found to be within permissible levels. Noise level report (Day time) for July'22 are appended below & photo copy is being attached. Minimum – 51.38 dB(A) Maximum – 67.95 dB(A) 2. All HEMM and light vehicles are provided

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S.No.	Condition	Compliance
		with silencers. Workers engaged in blasting and drilling operations, operations of HEMM, etc., exposed to high sound levels are provided with ear muffs and their working hours are reduced to prevent long exposure time. PPEs distributed is attached as Annexure - V
ii)	Controlled blasting techniques shall be practiced in order to mitigate ground Vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Yes, control blasting is been practiced, Vibration due to blasting is under limit as per DGMS guidelines. Blasting & Vibration report is attached as Annexure – VI
iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	Noise level survey is being carried out in prominent noise generating sites in the mine. Also, noise monitoring is regularly done by CMPDIL. The report is submitted on six-monthly basis along with Half-yearly EC compliance report. Annexure- IV
E. Mining Plan:		
i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there—under as applicable.	Mining is being carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there—under as applicable.
ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).	Mining is being carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
iii)	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.	Approval under the Forest (Conservation) Act, 1980 for diversion of total 107.42 ha of forest land for non-forestry purposes has been obtained vide following MOEF&CC letter No: I) 8-303/89—FC dated 26.10.1993 for 17.64 Ha in Phase-I II) 8-7/98-FC dated 10.12.2002 for 20.03 Ha in Phase-II. III) 8-89/2003-FC dated 27.08.2004 for 69.75 Ha in Phase-III.
iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Agreed.
F. Land Reclamation:		
i)	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEF&CC) from time to time shall be submitted to MOEF&CC/Regional Office (RO).	Satellite monitoring of entire lease hold area/core zone is done by CMPDIL. The report is being submitted as per the instruction. (Annexure-VII)
ii)	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in	The final mine void depth will be as per the approved Mine Closure Plan.

Standard Conditions

S.No.	Condition	Compliance
	<p>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.</p>	
iii)	<p>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 postmining land use pattern shall be submitted to the MOEF&CC/RO.</p>	<p>Backfilling, external OB dumping and afforestation shall be done as per the approved Mining Plan and the EIA/EMP submitted to this Ministry.</p>
iv)	<p>Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any. Along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.</p>	<p>Feasibility of use of Fly-ash for external OB dump and backfilling of mine shall be explored as and when required as per the said fly ash notification under the guidance of DGMS.</p>
v)	<p>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 stabilized with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.</p>	<p>At present, the top soil is being stacked at earmarked site near Bara simra Dump and spreading is done over slopes of backfilled area (RCML Patch) and internal OB dumps uniformly in the process of technical reclamation before plantation works. (Photograph-7)</p>
vi)	<p>The project proponent shall make necessary alternative arrangements, if grazing land is</p>	<p>Agreed, it will be complied as per the directions of Hon'ble Supreme Court of India.</p>

Standard Conditions		
S.No.	Condition	Compliance
	involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	
G. Green Belt:		
i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	Action plan for wildlife conservation has been prepared in consultation with concerned Divisional Forest Officer, Godda and it has been approved by PCCF/Chief Wildlife warden, Govt. of Jharkhand. Full efforts are being made during mining operation for conservation and protection of endangered/endemic flora/fauna spotted in the study area in consultation with the forest officials.
ii)	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.	Greenbelt consisting of 3-tier plantation has been developed all along the mine lease area. The green belt comprising a mix of native species (endemic species should be given priority) has been developed all along the major approach/ coal transportation roads.
H. Public Hearing and Human related issues:		
i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six—monthly basis.	Adequate illumination has been ensured at all mine location (as per DGMS standards) and monitored monthly. (Annexure-VIII)
ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	Periodical Medical Examinations (PME) of workers is being carried out at 5 year intervals in which audiometric tests are carried out. Last 5 Year-wise details are as under:- 2018 - 447 2019 - 446 2020 - 443 2021 - 690 2022 - 342 (upto sept 2022)
iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	Person working in dusty areas are given adequate training and information on safety and health aspects. They use protective devices like safety helmets, safety shoes, pollution masks, ear plugs and ear muffs.
iv)	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the	Regular action is taken on issues raised during public hearing. Land oustees are paid land compensation as per norms. The last five financial years payment details are as under:- 2017-18 - Rs. 357.63 Lakhs

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S.No.	Condition	Compliance
	R&R policy of the company/ State Government/Central Government, as applicable.	2018-19 - Rs. 3267.20 Lakhs. 2019-20 - Rs. 3667.00 Lakhs. 2020-21 - Rs. 904.164 Lakhs 2021-22 - Rs. 6430.72 Lakhs
v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/57/2014—IA.II (M) dated 29 th 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."	Agreed.

I. Corporate Environment Responsibility:

i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.111 dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	It is being followed as per the standard norms.
ii)	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The Environment 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.	The company has a well laid down environmental policy approved by board of directors.
iii)	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.	<u>Company Level</u> :- There is a Separate Environmental Management Cell with suitable qualified personnel under the control of General Manager (Environment) of ECL, who reports directly to the Head of the organization. <u>Project level</u> :- A separate environmental management cell with suitable qualified personnel has been formed at Rajmahal Area.
iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office	Action plan is prepared by the environment management cell on the basis of non-conformities with the conditions of E.C found during inter-area inspection conducted within ECL. The capital budget for environmental protection measures had been allocated as per Project Report and is kept as a separate fund. The revenue budget for OB Dump plantation, green belt development, is finalized annually as per the requirement. Total Rupees 21.24 Crores had been

Standard Conditions		
S.No.	Condition	Compliance
	along with the Six Monthly Compliance Report.	allocated till the end of mine life for Environmental Management.
v)	Self-environmental audit shall be conducted annually. Every three years, third party environmental audit shall be carried out.	It is being followed.
J. Miscellaneous:		
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State Of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	The environmental clearance granted for the project has been made public by advertising it in two newspapers of the district and the same has been displayed on the website of the company.
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	The copies of the environmental clearance have been submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to relevant offices of the government.
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half—yearly basis.	It is being followed.
iv.	The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NO _x (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	It is being followed.
v.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	It is being followed strictly.
vi.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/57/2014-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".	Agreed.
vii.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the	It is being strictly followed.

Standard Conditions		
S.No.	Condition	Compliance
	Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	
viii.	The project authorities shall inform to the Regional Office of the MoEF&CC regarding commencement of mining operations.	As the proposal was made for the expansion of existing project i.e. from 17.00 MTY to 23.80 MTY, mining operation was already in progress.
ix.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	It is being followed.
x.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Agreed. It is being followed.
xi.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Agreed.
xii.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed.
xiii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.
xiv.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed.
xv.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.	Full cooperation is extended to the officer(s) of the Regional Office who monitors the compliance of the stipulated conditions by furnishing the requisite data/ information/ monitoring reports.
xvi.	The above conditions shall be enforced. inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules. 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agreed.
Other Conditions		
i.	The proponent shall abide by all the	Agreed. It is being followed.

Standard Conditions		
S.No.	Condition	Compliance
	commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.	
ii.	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.	Agreed.
iii.	Any appeal against this Environment 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.	Agreed.
iv.	The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2 nd August 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others'.	Agreed.
v.	The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.	Agreed.
vi.	This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court. As applicable, and other statutory requirements.	Agreed.

Date: 24.11.2022

LM
24/11/22
General Manager (Operations),
Rajmahal Open Cast Project, ECL.

General Manager (O P)
Rajmahal OCP