



File No.: IA-J-11015/34/2022-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate
Change
IA Division



Dated 29/07/2025



To,

Sh. Shuvrendu Roy Choudhury
M/s. Vedanta Limited
Sesa Ghor, 20 EDC Complex, Patto, Panjim, Panjim, Jharsuguda, Odisha-403001
Email: krishna.kulkarni@vedanta.co.in

Subject: **Kuraloi-A North Coal Block Opencast Coal mine (ML area: 965.58 Ha having production capacity 8 MTPA) by M/s Vedanta Limited located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap; Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha - Environmental Clearances – regarding.**

Sir/Madam,

This is with reference to your online application vide proposal no. IA/OR/CMIN/440576/2023, dated 18.08.2023 and subsequent submission of additional information on 16/05/2025 & 19/06/2025 along with written submission dated 09.07.2025 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.	EC23A0101OR5393578N
(ii) File No.	IA-J-11015/34/2022-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	Kuraloi-A North Coal Block, IB-Valley Coalfield (ML Area: 965.58 Ha) with a Targeted Coal Production Capacity: 8.0 Million TPA located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari, Bartap, Tehsil: Lakhanpur, District: Jharsuguda, State: Odisha.
(viii) Location of Project (District, State)	Jharsuguda, Odisha

3. M/s. Vedanta Limited has made an application online vide Proposal No. IA/OR/CMIN/440576/2023, dated 18.08.2023 in the prescribed format along with copy of EIA/ EMP Report & Form 1, seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above.

4. The proposed project activity is listed at Item No. 1 (a)(3) 'Mining of Minerals' under Category "A" of the EIA Notification, 2006.

5. The instant Proposal was earlier considered and recommended by the EAC in its 49th Meeting held on 29th August 2023 for grant of EC subject to submission of Stage – I forestry clearance, in accordance with the provisions of the Ministry's OM dated 09.09.2011 and its subsequent amendments. The said proposal was processed in the Ministry based on the EAC recommendations. After approval of the Competent Authority, proponent was informed vide letter dated 16/10/2023 through PARIVESH with a request to submit Stage – I forestry clearance for 213.37 ha of forestland involved in the ML area. PP submitted the Stage – I forestry clearance letter on 16.05.2025, which is beyond the time period of 18 months. Hence, the proposal was referred back to the EAC as per Ministry's OM dated 19.06.2014 and was placed in the 26th EAC meeting held on 26.05.2025 and the same was deferred for want of additional information. PP submitted the additional information on 19.06.2025. Subsequently, the proposal was further considered in 28th EAC meeting held on 30th June 2025. The MoM for the same may be seen using the web link: parivesh.nic.in.

Details submitted by the project proponent

6. The Kuraloi-A North Coal Block Opencast Coal mine of M/s Vedanta Limited is within 965.58 Ha of ML area, having the production capacity of 8 MTPA, is located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap; Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha.

7. **Environmental Site Settings:** The project area is covered under Survey of India Toposheet No. covering F44R13 (64 E/7) and is bounded by the geographical coordinates ranging from Latitude: 21°47'58"N to 21°50'21"N and longitudes 83°48'14"E to 83°50'41"E.

The project falls in part of IB Valley, Severally Polluted Area (SPA) as per CEPI Assessment 2018. Safeguards proposed to be followed in this regard are mentioned in para 28.6.1 (3).

Forest Area: The project involves total 213.37 ha of forest land. Stage – I forest clearance on the same has been obtained for the same vide Proposal No. FP/OR/MIN/QRY/466926/2024, dated 12.05.2025 by MoEF&CC, New Delhi. There is no broken forestland in the instant project and further, 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 are 10 Schedule – I species [Canis aureus (Jackal), Rusa unicolor (Sambar) Felis chaus (Jungle Cat), Hyaena hyaena (Hyaena), Hystrix indica (Porcupine), Chamaeleo zeylanicus (Indian Chameleon), Naja naja kothia (Indian Cobra), Melursus ursinus (Sloth bear), Varanus bengalensis (Indian Monitor Lizard) and Elephas maximus (Elephant)] found in the study area. A Wildlife Conservation Plan has been prepared and approved by the Principal Chief Conservator of Forest Vide Letter No. 4371/CWLW-FDWC-FD-0081-2024, dated 16.04.2025 and Rs. 31.05 crore budget proposed for conservation activities in the project site and surrounding area.

Mine Lease details: Vedanta Limited has been declared as successful bidder in accordance with provision of rule 5(7) of the Coal Block Allocation Rules 2017 (the Rules) letter dated 10.06.2021 issued by Ministry of Coal. Subsequently, Vedanta Ltd. have signed the Coal Block Development & Production Agreement with the Government of India on 14.07.2021 and received Vesting Order from the Nominated Authority, Ministry of Coal, Government of India vide Allocation order No: NA-104/1/2021-NA, dated 03.09.2021. Details area given below:

S. No.	Govt. Order/Notifications as the case maybe	Area (ha)
1	Vedanta Limited has been declared as successful bidder in accordance with provision of rule 5(7) of the Coal Block Allocation Rules 2017 (the Rules) issued by Ministry of Coal	965.58
2	Signed the Coal Mine Development & Production Agreement with the Govt. of India	965.58
3	Vesting Order/Allocation Order from the Nominated Authority, Ministry of Coal, Government of India Allocation Order No: NA-104/1/2021-NA dated 03.09.2021	965.58
4	The mining Lease file has been recommended by Collector to Director of Mines, Steels and Mines Department dated 20.11.2024	965.58
Total-1		965.58
5	Details of LOI (for area outside lease area)	-
Grand Total		965.58

Other sensitive receptors:

Project site proximity to sensitive area	Distance in km (within 5 km from the ML area)		
i. Habitation	Village	Distance	Direction
	Banjari	Within ML Area	
	Piplimal	Within ML Area	
	Part of Habitation of Bartap, Belpahar & Kuraloi	Within ML Area	
	Belpahar	0.3 km	East
	Kuraloi	1.0 km	SE
	Jaybudia	1.3 km	WSW
	Khariaparha	1.7 km	NNE
	Bartap	1.8 km	WNW
	Bholamal	2.3 km	SSE
	Kapuparha	2.5 km	East
	Belpahar (M)	2.6 km	ENE
	Khairkuni	2.6 km	SSW
	Kudaloi	2.8 km	SSW
	Chaurimahul	3.1 km	N
	Mahjoi	3.2 km	NE
	Tingismal	3.6 km	South
	Gamhadera	3.6 km	East
	Mirdhadera	3.8 km	East
	Garrakhai	3.9 km	NE
ii. School	School		Distance
	Banjari Govt. High School (SSD)	Within Mine Area	
	02 Govt. Upper Primary School, Bartap	Within Mine Area	
	Government High School Pipilimal	Within Mine Area	
	Banjari Ashram School	Within Mine Area	
	Govt. Upper Primary School Karlakhaman	Within Mine Area	
iii. River/ Waterbody	River/ Nallah	Distance	Direction
	Lilari Nallah	Passing through the ML area	-
	Hinjankharu Jhor	Passing through ML Area	-

Project site proximity to sensitive area	Distance in km (within 5 km from the ML area)		
	River/ Nallah	Distance	Direction
	Puri Jhor	~3.0 km	South direction
	Bagdia Jhor	~5.0 km	WSW direction
iv. Forest	Reserved/ Protected Forest	Distance	Direction
	Bikramkhol RF	~0.2 km	SW direction
	Bikramkhol RF	~1.0 km	NE direction
	Rajpur RF	~2.0 Km	NE direction
	Thungopahar RF	~4.0 km	North direction
	Bandbahal PF	~3.5 km	NNW direction
	Kaudarha PF	~5.0 km	NNW direction
v. Archaeological Survey of India (ASI) protected site	No		
vi. Any other	No		

Diversions Proposed:

Transmission Lines: There is 05 high transmission lines (two 400 KV HT, three 220 KV HT) passing through the Coal Block. In-principle approval for diversion of these HT lines has been granted by Ministry of Power on 06.10.2023.

Nallah: Lilari Nallah cuts across the block flowing from NW to SE. It shall be diverted along the western part of ML periphery and will be connected to its original course in the south-east part of the coal block, beside this easterly flowing seasonal Hinjankharu Jhor which joins Lilari nallah at the center of the block will also be reorganized. Nallah diversion proposal is recommended by the Engg. In Chief, Department of Water Resource, Govt. of Odisha on 27.01.2025.

Schools and Habitation: Schools and Habitation within the ML area will be relocated as per the R&R Plan.

8. Details of ToR:

Date of Application	Details	Date of Accord	ToR Validity
02.09.2022	Vide letter no. J-11015/34/2022-IA-II(M)	25.10.2022	4 years from the date of the issuance of ToR

9. Method of Mining and Mine Plan: The Mine Plan and the Mine Closure Plan for Kuraloi-A North Coal Mine has been approved in favour of M/s Vedanta Limited by Ministry of Coal, Government of India vide Application No. Kuraloi (A) North Coal Mine ORJH/APP0080/2021 dated 05.08.2022, for the area of 965.58 Ha having production capacity 8 MTPA.

i. The method of mining proposed is fully mechanized opencast mining by shovel dumper combination with conventional drilling & blasting (OB) & Surface Miner (for extraction of coal).

ii. The total geographical reserves reported are 1680.23 MT, out of which mineable reserves are 148.29 MT and extractable reserves are 145.32 MT. Percentage of extraction is 8.65%. Further, exploration shall be carried out within 2 years of opening the mine and feasibility study shall be carried out for extraction of balance resources by underground mining method, as per the approved mine plan.

iii. There are total 18 workable seams with thickness ranging between 0.11 m to 8.20 m.

iv. Grade of Coal is G-13, G-14, G-15, G-16 & G-17.

v. Stripping ratio is 1:4.79.

vi. Life of mine is 23 years (including 2 years of construction).

vii. Top soil management:

- Quantity of Top Soil to be generated: At conceptual stage, 6.84 Million CuM of top soil will be generated.
- Storage of Top Soil: Initially top soil will be temporarily stacked at a designated place within the mine lease area.
- Handling/Utilization of Top Soil: Top soil will be used for greenbelt/plantation & waste will be used for backfilling, making embankment & internal road.
- Nos. of Top Soil dumps: 01

viii. Waste/ OB Management:

i. *Dump Details*: 689.60 Million CuM of OB will be generated, out of which 687.10 Million CuM will be internally backfilled and 2.50 Million CuM will be used for embankment. There will be two temporary external dumps within the mining lease.

Details	Internal Dumps		External Dumps		Remarks
	Nos.	Quantity of Waste/ OB stored (m ³)	Nos.	Quantity of Waste/ OB stored (m ³)	Whether external dump is outside mine lease area
Existing	-	-	-	-	-
Proposed	-	-	02	50,400,000	No
Total	-	-	02	50,400,000	-

Initially the waste will be managed into two temporary external dumps, which are planned to be rehandled into excavated pits. There will be no external dumps left at the end of the Mine life.

ii. *Specification of Each Dumps*:

Dump No.	Area (Ha)	Height	Quantity m3	Type (Internal/External)
01	12	30 m from OGL	2,400,000	External
02	80	30 m from OGL	48,000,000	External

ix. Details of Land use pattern:

A. *Pre – mining land use*:

S. No.	Particular	Private Land (Ha)	Govt. Land (Ha)	Forest Land (Ha)	Total Land (Ha)
1.	Agricultural Land	225.60	47.85	-	273.45
2.	Tenancy	264.29	-	-	264.29
3.	Water bodies	5.79	9.75	-	15.54
4.	Road	7.11	37.05	-	44.16
5.	Community /Other use	0.12	0.44	-	0.56
6.	Gochar	-	9.17	-	9.17
7.	Other Govt.	-	145.04	-	145.04

S. No.	Particular	Private Land (Ha)	Govt. Land (Ha)	Forest Land (Ha)	Total Land (Ha)
8.	Forest	-	-	213.37	213.37
Total		502.90	249.31	213.37	965.58

B. Post – mining land use pattern:

S. No.	Particular	Agriculture (Ha)	Plantation (Ha)	Water Body (Ha)	Public Use (Ha)	Forest Land (Returned) (Ha)	Undisturbed (Ha)	Total (Ha)
1	Total Excavation	-	-	-	-	-	-	635.50
	Backfilled Area	20	329.81	-	-	100	-	449.81
	Excavated Void	-	168.69	17.0	-	-	-	185.69
2	Diversion or Below River or Nala or Canal	-	-	24.58	-	-	-	24.58
3	Settling Pond	-	1.28	-	-	-	-	1.28
4	Road & Infrastructure	-	28.87	-	12.10	-	-	40.97
5	Rationalization Area	-	-	-	120.32	-	-	120.32
6	Garland Drains	-	7.50	-	-	-	-	7.50
7	Greenbelt	-	17.62	-	-	-	-	17.62
8	Undisturbed or Mining Right for UG	-	-	-	-	-	117.81	117.81
Total		20	553.77	41.58	132.42	100	117.81	965.58

x. Details of transportation:

- **In-pit to surface:** Coal from the pit to surface will be transported through dumpers via haul road to stockpile
- **Surface to siding:** The proposed block is 0.5 km away from Belpahar Railway Station in ENE direction. Coal will be transported to Belpahar Railway Station via road.
- **Siding to loading:** Coal will be transported from mine to Jharsuguda, Aluminum Plant of Vedanta Ltd. initially by road and later on via rail after commissioning of railway siding. Railway siding will be developed within 02 years from the start of the mining operation. Road distance of plant is 32 km from mine. Kuraloi North block is connected with NH-49. After 20 km, NH-49 is connected to SambalpurSundargarh-Rourkela Highway which will connect to Vedanta Limited Plant, Jharsuguda after 12 km.

Note: Railway siding will be located within the Mining Lease area along the western Boundary within the ML area. In principle approval for construction of Railway Siding within the Mine lease area has been obtained from the Divisional Office, Southeast Central Railways on 03.11.2022. The Engineering Scale Plan (ESP) approved by SECR on 03.01.2025.

xi. Details of Reclamation: At conceptual stage, total greenbelt/plantation will be developed on 553.77 ha; covering an area of 329.81 ha on backfilled area, 168.69 ha on excavated void, 28.87 ha on road & infrastructure, 7.50 ha on garland drains, 1.28 ha on settling pond and 17.62 ha along the 7.5m lease periphery.

10. Baseline Data: Details of the Fresh baseline data collected during March to May 2025 is as below:

S. No.	Parameter	Description
Study Period: Summer Season (March to May, 2025)		
1	AAQ parameters at 10 Locations (min & max)	Core Zone: PM10 – 43.8 to 74.6 µg/m3

	max)	<p>PM2.5 – 28.7 to 43.1 µg/m³</p> <p>SO₂ – 5.5 to 9.0 µg/m³</p> <p>NO₂ – 9.4 to 16.0 µg/m³</p> <p>Buffer Zone:</p> <p>PM10 – 37.5 to 121.6 µg/m³</p> <p>PM2.5 – 18.9 to 54.0 µg/m³</p> <p>SO₂ - 5.1 to 15.8 µg/m³</p> <p>NO₂ – 8.6 to 25.7 µg/m³</p>
2	Incremental GLC Level	<p>Within core zone</p> <p>PM10 = 8.72 µg/m³ (within mine lease)</p> <p>PM2.5 = 3.47 µg/m³ (within mine lease)</p> <p>SO₂ = 3.59 µg/m³ (within mine lease)</p> <p>No₂ = 3.76 µg/m³ (within mine lease)</p> <p>Within buffer zone</p> <p>PM10 = 0.1 µg/m³ (Level at ~0.1 km in North direction)</p> <p>PM2.5 = 0.3 µg/m³ (Level at ~0.1 km in North direction)</p> <p>SO₂ = 0.5 µg/m³ (Level at ~0.1 km in North direction)</p> <p>No₂ = 0.6 µg/m³ (Level at ~0.1 km in North direction)</p>
3	Ground water quality at 09 Locations	<p>pH - 6.06 to 8.33</p> <p>Total Hardness – 106.6 to 195.4 mg/l</p> <p>Alkalinity – 82.8 to 174.4 mg/l</p> <p>TDS – 154.0 to 278.0 mg/l</p> <p>Chloride - 23.5 to 46.7 mg/l</p> <p>Sulphates – 6.48 to 20.4 mg/l</p> <p>Nitrates – 2.02 to 5.16 mg/l</p> <p>Calcium – 18.1 to 44.8 mg/l</p> <p>Magnesium – 13.54 to 20.9 mg/l</p> <p>Iron - 0.08 to 0.37 mg/l</p> <p>Fluoride - 0.18 to 0.48 mg/l</p>
4	Surface water quality at 08 Locations	<p>pH– 7.21 to 7.71</p> <p>BOD – 2.0 to 8.0 mg/l</p> <p>COD – 10.0 to 30.0 mg/l</p> <p>DO – 6.5 to 7.3 mg/l</p> <p>Total Hardness – 38.9 to 110.9 mg/l</p> <p>Total Dissolved Solid - 69 to 115 mg/l</p> <p>Alkalinity – 26.8 to 83.9 mg/l</p> <p>Conductivity – 107.0 to 270.0 µS/cm</p> <p>Sulphates – 2.02 to 17.3 mg/l</p> <p>Nitrates - 1.56 to 20.08 mg/l</p> <p>Calcium – 10.7 to 30.2 mg/l</p> <p>Magnesium – 2.7 to 8.6 mg/l</p> <p>Iron - 0.1 to 0.37 mg/l</p>
5	Noise levels Leq (Day and Night) at 10 Locations	<p>During Day Time - 50.4 Leq dB(A) to 63.9 Leq dB(A)</p> <p>During Night Time - 39.5 Leq dB(A) to 48.2 Leq dB(A)</p>
6	Traffic assessment study findings	<p>Coal from pit to the surface will be transported through dumpers via haul road to</p> <p>Traffic survey has been conducted on the NH-49 and SH-10 connecting the proposed project site to the plant which approximately 32 km from the mine site.</p> <p>There is no change in transportation route. Initially the transportation will be done by road till commissioning of the railway siding excepted within 2-3 years from the start of the production.</p> <p>Traffic Scenario during Year 2025</p>

		<table><tr><th>Road</th><th>V (Volume in PCU/hr)</th><th>C (Capacity in PCU/hr)</th><th>Existing V/C Ratio</th><th>LOS</th></tr><tr><td>NH-49</td><td>581</td><td>2900</td><td>0.20</td><td>B</td></tr><tr><td>SH-10</td><td>610</td><td>2900</td><td>0.21</td><td>B</td></tr></table>	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS	NH-49	581	2900	0.20	B	SH-10	610	2900	0.21	B			
Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS																
NH-49	581	2900	0.20	B																
SH-10	610	2900	0.21	B																
		<p>PCU load and level of service (LOS) after proposed project will be:</p> <table><tr><th>Road</th><th>Increased PCUs/ State Highway</th><th>V (Volume In PCU/hr)</th><th>C (Capacity in PCU/hr)</th><th>Modified V/C Ratio</th><th>LOS</th></tr><tr><td>NH-49</td><td>263</td><td>581+263=844</td><td>2900</td><td>0.29</td><td>B</td></tr><tr><td>SH-10</td><td>263</td><td>610+263=873</td><td>2900</td><td>0.30</td><td>B</td></tr></table>	Road	Increased PCUs/ State Highway	V (Volume In PCU/hr)	C (Capacity in PCU/hr)	Modified V/C Ratio	LOS	NH-49	263	581+263=844	2900	0.29	B	SH-10	263	610+263=873	2900	0.30	B
Road	Increased PCUs/ State Highway	V (Volume In PCU/hr)	C (Capacity in PCU/hr)	Modified V/C Ratio	LOS															
NH-49	263	581+263=844	2900	0.29	B															
SH-10	263	610+263=873	2900	0.30	B															
		<p>Note: Capacity as per IRC: 64-1990 Guide line for capacity for roads.</p> <p>Conclusion: The level of service will remain same after including additional traffic due to proposed project.</p>																		
7	Flora and Fauna	<p>There are 10 Schedule – I species [Canis aureus (Jackal), Rusa unicolor (Sambar), Felis chaus (Jungle Cat), Hyaena hyaena (Hyaena), Hystrix indica (Porcupine), Chamaeleo zeylanicus (Indian Chameleon), Naja naja kothia (Indian Cobra), Melursus ursinus (Sloth bear), Varanus bengalensis (Indian Monitor Lizard) and Elephas maximus (Elephant)] found in the 10 km study area. A Wildlife Conservation Plan has been prepared and approved by the Principal Chief Conservator of Forests vide Letter No. 4371/CWLW-FDWC-FD-0081-2024, dated 16.04.2025 and Rs. 31.05 crore budget proposed for conservation activities in the project site and surrounding area.</p>																		
8	Water Requirement	<p>Ground Water Intersection: The estimated maximum Groundwater seepage in the ML area for the next five years of mining is approximately 6281 m3/day in 5th year and 3079 m3/day in end of life of mine stage. Permission regarding ground water withdrawal (100 KLD) & dewatering (2670 KLD) vide NOC No. CGWA/NOC/MIN/ORIG/2024/19984, dated 06.03.2024.</p> <p>Water Requirement: Total water requirement is estimated as 1100 KLD, same will be sourced from Lilari Nallah (during initial period of operation, later the water requirement will be sourced from Mine dewatering and seepage water), Borewells & Rainwater Harvesting.</p> <p>NOC (For Surface Water): During initial year of mine operation, water 1000 KLD will be sourced from the Lilari River after obtaining the permission from the competent Authority.</p> <p>NOC (Ground Water): Total water requirement is estimated as 1100 KLD, same will be sourced from Lilari Nallah (during initial period of operation, later the water requirement will be sourced from Mine dewatering and seepage water), Borewells & Rainwater Harvesting. Permission regarding ground water withdrawal (100 KLD) &</p>																		

		dewatering (2670 KLD) vide NOC No. CGWA/NOC/MIN/ORIG/2024/19984, dated 06.03.2024.
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11. Details of water requirement: PP submitted that Total water requirement is estimated as 1100 KLD, same will be sourced from Lilari Nallah (during initial period of operation, later the water requirement will be sourced from Mine dewatering and seepage water), Borewells & Rain Water Harvesting.

Application for ground water withdrawal & dewatering [quantity 3195 KLD (borewell: 525 KLD, dewatering/ water seepage: 2670 KLD)] has been submitted to CGWA vide application No. 21-4/5138 /OR/MIN/ 2023 dated 08.07.2023. Permission regarding ground water withdrawal (100 KLD) & dewatering (2670 KLD) vide NOC No. CGWA/NOC/MIN/ORIG/2024/19984, dated 06.03.2024.

PP further submitted that, Lilari Nallah flows from Northwest to South East which shall be diverted along the ML periphery and will be connected to the original course of IB River in the south-west part of the coal block. Besides this easterly flowing seasonal Hinjankharu Jhor which joins Lilari Nallah at the center of the block will also be reorganized.

Application along with a Detailed Project Report (DPR) has been prepared by an Expert and vetted by IIT- Bhubaneswar, is submitted to Engineer in Chief, Department of water resources, GoO on dated 13.06.2023 for approval of diversion of the Lilari Nallah with Hinjankharu nalla. The DPR envisages that the proposed diversion of the Nallah will not obstruct the flow of water. The Design Department of Water Resources, GoO has approved the design proposed along the diverted route vide letter dated 27.06.2024. The proposal for diversion of Nallah has also been scrutinized by the Expert Committee of the Department of Water Resources, GoO, presentation held on dated 21.12.2024. The EIC, WRD has recommended the proposal to the Dept. of Water Resources, GoO on vide letter No 2775 dt. 27.01.2025 for approval.

12. Details of power requirement and diversion of transmission line/ Hi-tension line: Power at 33 KV by double circuit overhead feeder from 132/33KV OPTCL (Odisha Power Transmission Corporation Ltd.) Substation located about 7.0 Km away from the project site at Punjipathara and it is scheduled to be operational soon. Considering mine dewatering, coal dispatch system, illumination and other surface load, the main substation with a capacity of 2 x 12.5 MVA, 33/6.6 KV has been envisaged to cater the total power requirement of the project. It is also mentioned that emergency power supply has been arranged with 125 kVA DG sets.

There is 05 high transmission lines (two 400 KV HT, three 220 KV HT) passing through the Coal Block. In-Principle approval for diversion of these HT lines has been granted by Ministry of Power on 06.10.2023.

13. Details of Solid and Hazardous Waste:

S. No.	Type of Waste	Source	Quantity (TPA)	Disposal
1.	Solid Waste (Domestic waste)	Mine Site	15	Composted and will be used in greenbelt/plantation by haul road
2.	Plastic Waste (Packing material)	Coal Mine Store Office	0.05	Sale to authorized recyclers by road
3.	Used LED bulbs/ wiring/ laptop/ invertor/ solar panels)	Mine Office	0.5	Sale to recyclers or at designated collection center by road
4.	Batteries Waste	HEMM/Vehicles/Invertor	0.5	Sale to recyclers or at designated collection center by road
5.	Used/Spent Oil	HEMM Workshop	110	Sale to the authorized recyclers by road
6.	Waste or residues containing oil	HEMM Workshop	20	Sale to the authorized recyclers by road
7.	Contaminated cotton rags	HEMM Workshop	0.5	Sale to the authorized recyclers by road
8.	Construction	Construction of mine office	35	Recyclable material will be sold &

S. No.	Type of Waste	Source	Quantity (TPA)	Disposal
				others will be used in road/ramp by road

14. Public Consultation/ Hearing:

Details of advertisement given	National Level/Local Level: The Times of India (English Daily) & The Dharitri (Odia daily) on 28.06.2023
Date of public consultation	01.08.2023, at 11:00 AM
Venue	Mouza Piplimal, Khata No. 205 (AJA), Plot No. 1(P), Area 2.50 Ac, Kisam Patita, Tehsil: Lakhanpur, District: Jharsuguda (Odisha)
Presiding Officer	Chaired by: Shri. Prabeer Kumar Nayak ((OAS) Additional District Magistrate, Jharsuguda) and Shri. Hiranya Kumar Nayak (RO, SPCB, Odisha, Jharsuguda)
Number of Person Attended Hearing	336
Number of representations received in writing from the district and outside of district, please give details	38
Major issues raised	Major issues raised in the public hearing include Protection of the Air, Water, Soil, Noise & Forest Environment, Employment, Education, Health, Infrastructure Development, Women Empowerment, Land Acquisition and Compensation, Diversion of Lilari Nallah and Hanjankhara Jhor, Socio-economic development etc. Budget proposed for addressing the issues raised during Public Hearing is Rs. 800 Lakh as capital cost and Rs. 47 Lakh as recurring cost.

Proposed Physical Targets for Addressing Issues of Public Hearing as per MoEF&CC, OM Dated 30.09.2020 & 20.10.2020

S. No.	Sector wise Activities	Budget for PH Concerns (in Rs. Lakhs)				
		1 st	2 nd	3 rd	Capital	Recurring
A. Health & Family Welfare Activities						
1		50.0	50.0	50.0	150.0	10.0
	Total (A)	50.0	50.0	50.0	150.0	10.0
B. Vocational Skills & Employment						
1		30.0	30.0	30.0	90.0	10.0
	Total (B)	30.0	30.0	30.0	90.0	10.0
C. Livelihood						
1	Training & technical support will be provided in Apiculture, Mushroom Farming, stitching, Pisciculture, Poultry & Goat Farms etc. after proper survey and in consultation with villagers/SHG group.	15.0	15.0	15.0	45.0	5.0
2	Support shall be provided for developing facilities like Pisciculture, Meeting rooms, Poultry & Goat Farms etc. through Government Schemes and Financial Institute.	20.0	20.0	20.0	60.0	2.0
	Total (C)	35.0	35.0	35.0	105.0	7.0
D. Education and Sports Promotion						
1	Educational facilities / infrastructure shall be provided to the existing schools in consultation with District Authority and School Committee.	20.0	20.0	20.0	60.0	2.0
2	Scholarships for merit & economically backward students	5.0	5.0	5.0	15.0	5.0

S. No.	Sector wise Activities	Budget for PH Concerns (in Rs. Lakhs)				
		1 st	2 nd	3 rd	Capital	Recurring
	shall be provided for higher education, after conducting survey in peripheral Villages.					
3	Training shall be imparted to the local sports youth for participating state level competition.	20.0	20.0	20.0	60.0	2.0
	Total (D)	45.0	45.0	45.0	135.0	9.0
E. Community Welfare & Infrastructure Development Projects						
1	Drinking water facility, Street Light, and provision of approach road shall be provided in periphery Villages in a phased manner.	60.0	60.0	60.0	180.0	5.0
2	Support for construction of drainage system in periphery Villages	10.0	15.0	15.0	40.0	2.0
3	Fund for Kalyan Mandap	10.0	10.0	10.0	30.0	1.0
4	Possibility of constructing Check dams/ other facilities in the area shall be explored in consultation with Water Resource Department.	10.0	15.0	15.0	40.0	2.0
5	Support will be given for Sustaining the traditional culture of the Villages.	10.0	10.0	10.0	30.0	1.0
	Total (E)	100	110.0	110.0	320.0	11.0
	Grand total (A + B + C + D + E)	260	270	270	800	47

15. EMP Budget: Total project cost is Rs. 200000 Lakhs. Capital cost for the environmental protection measures is Rs. 2361.1 Lakhs and recurring cost is Rs. 275.86 Lakhs/ Annum. Detailed break-up is given below:

S. No.	Activities	Capital Cost (Rs. In Lakh)	Recurring Cost (Rs. In Lakh)
Mitigative Measures			
1.	Mobile Water Tanker for water sprinkling on Haul Road (70 KL & 28 KL)	100	3.0
2.	Fixed Water Sprinkler on Permanent Haul Road (1.5 km)	90	1.5
3.	Fixed Water Sprinkler at Coal Stock Yard (1.5 km)	60	0.5
4.	1000 m black topped /cemented road will be prepared & maintained on regular basis	500	1.0
5.	Toe walls of adequate size (1.2 m width & 1.5 height x 4000m) for stability of the dumps	240	1.0
6.	Pollution Control Device	50	13
Greenbelt/Plantation Details			
7.	Greenbelt on 17.62 ha Area (Saplings: 44050, Cost: Rs. 88.10 Lakh)	88.10	10
	Plantation in excavated void covering an area of 168.69 ha (Saplings: 421725, Cost: Rs. 844 Lakh, considering 13 years)	-	64.92
	Plantation along Road & Infrastructure of Area 28.7 ha (Saplings: 71750, Cost: Rs. 108 Lakh, considering 18 years)	-	6.0
	Plantation along Backfilled Area of 329.81 ha (Saplings: 824525, Cost: Rs. 16.49 Crore considering 18 years)	-	91.61
	Plantation along Settling Pond & Garland Drains Area of 8.78 ha (Saplings: 21950, Rs. 43.90 Lakh, considering 18 years)	-	2.43
8.	Construction of Garland Drain [width 3.0 (top) x 2.0 m (bottom)]	8.0	0.8
9.	Construction of 03 nos of Settling tank (L x W x D = 40m x 30 m x 3m)	40	5
10.	Construction of 2 nos of Check Dam	15	3
11.	Nallah Protection Bunds along the length of the nallah diverted towards west & south Mining Lease periphery	1000	20

S. No.	Activities	Capital Cost (Rs. In Lakh)	Recurring Cost (Rs. In Lakh)
12.	Rainwater harvesting structure	20	4
Sub-total		2211.10	230.76
Monitoring			
1.	Installation of 03 CAAQMS within core zone	70	10
2.	Fugitive dust emission monitoring (05 locations * monthly)	10	2
3.	Surface Water Quality Analysis (3 locations)	6	0.4
4.	Installation of 3 nos of piezometer along the periphery	6	1.5
5.	Ground water quality analysis (03 times in a year)	-	1.5
6.	Procurement of the Blast Vibration Measuring Instrument & Noise level meter	5	0.5
7.	Controlled blasting for minimizing ground vibration, fly rock, air pressure/ noise, etc. by Using Nonel and Exel	3	14
8.	Ambient Noise Monitoring (06 locations quarterly frequency)	3	0.6
9.	Workshop Waste Water Quality Analysis (monthly) as well as maintenance of oil-water separators	4	0.7
10.	Peak Particle Velocity Monitoring for nearest habitation	10	1.5
11.	Work Place Noise Monitoring	6	0.4
12.	Providing Ear muffs/plus to workers working in high noise area	2.0	1.0
Sub Total B		125	34.10
C	Miscellaneous		
1.	Digital mapping of entire mine area once in three years (Rs. 3 Lacs once in 3 years)	-	3
2.	Occupational Health Check-up of Mines Employees	15	5
3.	Others, if any	10	3
Sub Total C		25	11
Total		2361.1	275.86

A. Air Management

- Drilling & blasting will be carried out for overburden.
- Coal excavation will be carried out by Surface Miner and shovel-dumper combination for OB removal.
- Wet drilling will be carried out along with dust collection system.
- Blasting will be carried out with optimal quantity of explosives and with technically established blast design.
- Controlled blasting techniques will be adopted, as per the DGMS guideline.
- Blasting will be carried out during day time only.
- There is no change in transportation route. Initially the transportation will be done by road till commissioning of the railway siding excepted within 2-3 years from the start of the production.
- PUC certified vehicles will be used (as per the RTO requirement) and Regular maintenance of HEMMs & transportation vehicles will be done.
- Regular maintenance of HEMMs & transportation vehicles will be done.
- Permanent water sprinkling arrangements will be done for main haul road.
- Personal Protective Equipment like dust masks, ear plugs, ear-muffs will be provided to mine employees.
- Plantation around quarry, office, services areas and dumps will be carried out.
- Ambient Air Quality will be monitored regularly and maintained in prescribed norms.

B. Noise Management

- Modern drilling & blasting technique will be adopted for carrying out blasting in overburden.
- Drilling with sharp drill bits to achieve optimum drilling performance and to reduce noise generation at source will be adopted.
- Personal protective equipment's i.e. earmuffs/ earplug in drilling & in high noise area shall be used.
- As Blasting will be done in accordance with standards prescribed by DGMS therefore, ground vibrations will not affect the structures in the vicinity of mine area.
- Optimal explosives charge per hole and per delay will be maintained as per recommendation of the Blast design study, which will be conducted after getting mine opening permission.
- Blasting will be carried out by use of non-electric detonators (NONEL) system and the impacts of noise generated due to blasting is momentary.
- New generation and advanced technology HEMMs will be deployed.
- Adequate silencers in HEMMs will be provided to reduce generation of noise.
- Proper and routine maintenance of HEMMs, oiling and greasing of machines at periodic intervals shall be carried out.
- Insulators will be provided in the primary/secondary sizes to control the noise pollution.
- Development of green belt & plantation around the mining activity & other areas will be carried out.
- Whole Body Vibration Exposure health risk assessment in use of HEMM will be carried out.
- Work place noise monitoring will be carried out quarterly.
- Vibrations and noise monitoring will be carried out regularly.

C. Water Management

- Waste-water generated from mine office, rest shelters, Canteen etc. will be treated in STP and treated water will be used for greenbelt/ plantation development.
- Waste water from the HEMM washing/ workshop will be treated in ETP; after treatment, water will be reused in dust suppression.
- The Lilari nallah shall be diverted for along the ML periphery and will be connected to its original course in the south-west part of the coal block. Beside this easterly flowing seasonal Hinjankharu Jhor which joins Lilari Nallah at the centre of the block will also be reorganized. The proposed Nalla Diversion will be implemented subject to approval from Water Resources Department, Govt. of Odisha.
- Garland drains will be developed along the periphery of the mine & at strategic location to channelize the surface run-off.
- Check dams will be constructed at required locations to arrest eroded materials.
- Settling ponds will be constructed to treat mine discharge water.
- Proper profiling of working benches of pits and dumps will be done to channelize water in garland drains & sumps.
- Ground water quality & level will be monitored regularly.

D. Greenbelt/ Plantation

- At conceptual stage, greenbelt/plantation will be carried out on 329.81 ha of backfilled area, 168.69 ha on Excavated void, 28.87 ha on Road & infrastructure, 7.50 ha on garland drains, 1.28 ha on settling pond and Greenbelt will be

developed covering an area of 17.62 ha along the 7.5m lease periphery.

- Total 553.77 ha land is proposed to be covered under green belt/plantation in phases till conceptual stage.
- Local and fruit bearing species will be planted in consultation with local forest officer.
- The company will try to maintain the survival rate more than 90%..

16. Plantation: At conceptual stage, greenbelt/plantation will be carried out on 329.81 ha of backfilled area, 168.69 ha on Excavated void, 28.87 ha on Road & infrastructure, 7.50 ha on garland drains, 1.28 ha on settling pond and Greenbelt will be developed covering an area of 17.62 ha along the 7.5m lease periphery. Hence, total 553.77 ha land is proposed to be covered under plantation (including greenbelt) in phases till conceptual stage. Local and fruit bearing species will be planted in consultation with local forest officer. At conceptual stage, approximately 1384375 nos of saplings will be planted on 553.37 ha area @ 2500 saplings per ha. The survival rate will be maintained to 90%. Rs. 27.68 crore have been earmarked for greenbelt & plantation till the end of life of mine @ Rs 200/sapling (including plantation and maintenance cost).

17. Rehabilitation & Resettlement: The area of proposed mine is 965.58 ha which falls in 6 Villages namely Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap. Out of the total block area, 502.90 ha is Private Land, 249.31 ha is Govt. Land and 213.37 ha is Forest Land. Vedanta Limited will acquire the private land through IDCO as per the provisions of LARR Act, 2013 and Odisha Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Rules, 2016 and other related Acts and Rules. Land acquisition shall be done by the state government in phased manner to ensure minimal disturbance of the land & associated people. No forceful land acquisition will be undertaken. Scheduled land which will be acquired by state government (through IDCO), Vedanta Limited will pay the compensation to the state government and in turn, the state government will pay to the landowners.

18. Project Cost: The capital cost of project is 2000 Crore. Capital cost for the environmental protection measures is Rs. 23.61 Crore and recurring cost is Rs. 2.75 Crore / Annum. Total manpower (Direct & Indirect) for this project will be 1235 persons. Preference will be given to locals as per their eligibility & requirement.

19. Details of pending litigations: PP reported that there is no legal issue/violation w.r.t i) Environment (Protection) Act, ii) Air (P&CP) Act, Water (P&CP), Act, Van (Sanrakshan Evam Samvardhan) Adhiniyam, Wildlife Protection Act, MMDR Act, Factories Act. Further, there is no court case on the project.

20. Written Submissions: PP submitted the following details during the meeting:

Point No. 1: Proposed additional environmental safeguards measures to be adopted for better environment protection.

Reply: Environmental safeguard measures given during the EIA/EMP Report and during the EC Appraisal; besides this, additional environmental safeguards measures to be adopted for better environment protection are as follows:

- 50,000 saplings will be planted along the entire length of the 32 km along road side after taking due approval from concern authority. Rs. 150/- Lakhs budget has been earmarked for the same.
- Another 50,000 Saplings will be planted in available open spaces in the nearby villages of the study area with a financial outlay of Rs. 150 lakhs after taking permission from concern authority.
- The Company is also committed to develop Miyawaki Plantation in the greenbelt area of 17.62 ha. Additionally, 97000 saplings will be planted along with additional budget of Rs. 300 lakhs.

Point No. 2: Biodiversity Species in the area and impact on the same along with Management Plan.

Reply: Ecology & Biodiversity study has been carried out within 10 km radius.

- List of flora & fauna and Biological Study Report is duly authenticated by the Divisional Forest Officer, Jharsuguda Vide letter No. 4326/4F (Misc.), Jharsuguda dated 01.08.2023.
- Lilari Nallah flows from Northwest to South East of the block, which shall be diverted along the ML periphery and will be connected to the original course of IB River in the south-west part of the coal block. There will be the loss of riparian ecology due to the diversion of nallah and the company will do the riparian ecology study along the nallah and also the 50m safety barrier will be left along the diverted nallah.
- Total nos of trees that will be cut during the mining are 54,200 with some species like Neem, Palas, Teak, Kasi, Mahua,

Harada, Harida, Kendu, Khair, Kashi, Sal, Bel, Pipal Kaju, Dhaura etc.

- Greenbelt/Plantation will be covered over an area of 553.77 ha (Greenbelt: 17.62 ha, backfilled area: 329.81 ha, excavated void 168.69 ha, Settling Pond 1.28 ha and Garland drains 7.50 ha, Road & Infrastructure: 28.87 ha).
- At conceptual stage, approximately 1384375 nos of trees will be planted on 553.37 ha area @ 2500 saplings per ha.
- Rs. 27.68 crore have been earmarked for greenbelt & plantation till the end of life of mine @ Rs. 200/sapling (including plantation and maintenance cost).
- Besides this, 50,000 saplings will be planted along the entire length of the 32 Km along road side after taking due approval concern authority. 50,000 saplings will be planted in available open spaces in the nearby villages of the study area after taking permission from concern authority and will also develop Miyawaki Plantation covering the greenbelt area of 17.62 ha with additionally, 97000 saplings. Total budget proposed is Rs. 600 Lakh for this plantation.
- 100 ha area also to be developed under the plantation and same will be returned to the Forest.
- There are 10 Schedule – I species [Canis aureus (Jackal), Rusa unicolor (Sambar) Felis chaus (Jungle Cat), Hyaena hyaena (Hyaena), Hystrix indica (Porcupine), Chamaeleo zeylanicus (Indian Chameleon), Naja naja kothia (Indian Cobra), Melursus ursinus (Sloth bear), Varanus bengalensis (Indian Monitor Lizard) and Elephas maximus (Elephant)] found in the 10 km study area.
- A Wildlife Conservation Plan has been prepared and approved by the Principal Chief Conservator of Forest Vide Letter No. 4371/CWLW-FDWC-FD-0081-2024, dated 16.04.2025 and Rs. 31.05 crore budget proposed for conservation activities in the project site and surrounding area.
- WLCP Approval Letter along with Wildlife Conservation Plan is submitted.

Point No. 3: Total Waste Generation and its Management.

Reply: According to the Approved Mining Plan by the Ministry of Coal, Kuraloi (A) North coal mine is proposed to produce 145.32 Million Tonnes of coal over a period of 21 years by opencast mining. Life of mine is considered as 23 years with two years of construction period including surface reorganization. The waste generation is estimated to be 696.0Mbcum and the strip ratio works out to 4.79 bcum/tonne.

- The initial mine cut will start from the incrop of Belpahar seam, which is located in the south east corner of the proposed lease boundary and will continue to a depth of ~95m. The pit proposed in south sector will follow floor of Belpahar bottom seam. Initially, top soil will be stripped from the excavation area and will be stacked in top soil dump. Waste from south sector will be dumped in TD1 (12 Ha) initially. Concurrent In-pit dumping will commence from Y3 and the waste dumped in TD1 will be rehandled back to the pit from production year 4 (Y6). The top soil will be spread over the In-pit dump concurrently.
- The north sector is proposed to commence during the production year 4 (Y6) from the in-crop of Belpahar seam from the south eastern side. The pit bottom will follow the floor of Local-07 seam. The pit will progress to a maximum depth of ~220m. A temporary topsoil stack with an area of 25Ha is proposed in the northern side of the pit and it is proposed to accommodate 1.88Mbcum of topsoil. The waste generated from north sector is proposed to be handled initially in the void of the south sector, 61Mbcum of waste from north sector is proposed to be accommodated in the south sector pit up to a height of 120m from OGL.
- A temporary waste dump (TD2) with an area of 80Ha is proposed in the northern side of the pit and it is proposed to accommodate the remaining waste (48Mbcum) generated in the north sector till the pit reaches the ultimate pit depth. Concurrent in-pit dumping in north sector will commence from production year 7 (Y9). The waste in the temporary dump 2 will be rehandled back into the pit once it reaches the ultimate depth from production year 14 (Y16). Top soil will be spread over the in-pit dump concurrently after backfilling commences. The height of the in-pit dump planned is 120m from OGL.
- After completion of mining operation, during post closure period a waste of 54Mbcum from the crown dump of south sector will be handled back to the pit void left over (185.69 Ha). A final void with an area of 17Ha up to a depth of 25m for water body will be left for recharge of water and to promote aquatic life in the area.

Point No. 4: Planning for establishment of Railway Siding for the project

Reply: It is hereby submitted that we are in process of obtaining various statutory approvals and acquiring land for executing the Mining Lease. Further, we are also in the process of obtaining several approvals and acquiring land for the construction of the Railway siding to ensure rail transport of coal which is expected within 3 to 4 years from the start of the coal production. It may also be noted that without EC, FC, CTE, CTO & ML of Kuraloi (A) North Coal Mine as per Statute, we cannot commence any activities within the Mining Lease area.

- Further, construction of Railway Siding also requires numerous approvals such as Consent to Establish, and Consent to Operate including requisite approvals from Indian Railways. Keeping these approvals and land acquisition factors in mind,

we had envisaged the completion of commissioning of the Railway Siding by Mar'2030.

- However, basis the recommendation of the esteemed EAC (meeting held on 30 June 2025), we are hereby committed to expedite the Railway siding project for Kuraloi by Mar'2029. Numerous advance actions have already been taken by the Project Proponent for the Railway Siding Construction, which can help meet the timeline of Mar'2029.
- A brief detail of the activities completed and action plan for Railway siding construction is given below:

S. No.	Activity	Status / Completion Target
1	In-Principal Approval from Ministry of Railways	Completed, Nov 2022
2	Site Survey & DPR	Completed, Jan 2024
3	ESP Approval from Railways and Vendor onboarding for Railway Siding Work	Completed, Dec 2024
4	Drawings & Plan, Detail Engineering Approvals from Railways	Oct 2025
5	Land Acquisition Completion and obtaining all statutory approvals	Dec 2026
6	Civil Works & Erection	Dec 2027
7	S&T and OHE Works	Sept 2028
8	Testing, Commissioning and Operationalization	Mar 2029

Observation and deliberation of the EAC:

21. Committee after deliberations noted the following:

- The instant project is for grant of Environment Clearance to M/s Vedanta Limited for Kuraloi-A North Coal Block Opencast Coal mine (ML area: 965.58 Ha having production capacity 8 MTPA), located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap; Tehsil: Lakhanpur; District: Jharsuguda; State: Odisha.
- The instant project was earlier appraised in 49th EAC Meeting held on 29th August 2023 and the same was recommended by the EAC subject to submission of Stage – I forestry clearance, in accordance with the provisions of the Ministry's OM dated 09.09.2011 and its subsequent amendments.
- PP submitted the Stage – I forestry clearance letter on 16.05.2025, which is beyond the time period of 18 months. Hence, the proposal was referred back to the EAC as per Ministry's OM dated 19.06.2014 and was placed in the 26th EAC meeting held on 26.05.2025. Wherein, the proposal was deferred for want of fresh baseline data as the same was older than 3 years and PP submitted the required additional information vide ADS reply dated 19.06.2025.
- The Committee opined to reiterate the recommendations of 49th EAC Meeting held on 29.08.2023 in terms of the provision contained under the O.M. dated 19/06/2014.
- The instant project falls in part of IB Valley, i.e., Severally Polluted Area (SPA) as per CEPI Assessment 2018. As per the suggestions of the EAC, PP submitted the additional environmental safeguards proposed to be undertaken in this respect.

Recommendations of the Committee:

22. Based on the discussions held and the documents submitted, the EAC reiterated its recommendations of its meeting held on 29/08/2023 and **recommended** the instant proposal for grant of Environment Clearance for the “Kuraloi-A North Coal Block Opencast Coal mine (ML area: 965.58 Ha having production capacity 8 MTPA) by M/s Vedanta Limited located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap; 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. Vedanta Limited** for “Kuraloi-A North Coal Block Opencast Coal mine (ML area: 965.58 Ha having production capacity 8 MTPA), located at Villages: Pipilimal, Dhauramunda, Kuraloi, Belpahar, Banjari and Bartap; 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, Chandrasekharpur, 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 not carry out the mining activities in the 213.37 ha of forestland, without obtaining the Stage – II forestry clearance on the same.
1.2	Project proponent shall divert the Lilari Nallah in a manner that its construction for diversion shall be done in one go without affecting habitation and in this regard, works shall be designed to complete the diversion avoiding Monsoon season (i.e. effective working months of non-monsoon season). Embankment height shall be maintained on both side of stream with sufficient free board height from its HFL. The diversion of Lilari Nallah shall be monitored by IRO and complete report with the drone video and satellite imagery shall be submitted to IRO, MOEF&CC. A 50-meter safety barrier shall be left along the diverted nallah.
1.3	The mining plan shall be revised/ amended as per the MoC guidelines at later stage after incorporating the diversion of nallah in one go with year-wise coal production.
1.4	Project proponent shall maintain sufficient safety width of embankment all along the diverted stream/ nallah and conduct dense plantation with fruit bearing native species by itself.
1.5	Project proponent shall install dedicated in-pit conveyor belt with silo loading system till railway siding for transportation of 100% extracted coal through rail by March 2027. Accordingly, SPCB should grant the consent to operate.
1.6	Transportation of coal shall be done in covered trucks till March 2027, PP shall deploy the truck size of upto 40 tonnes (payload) for transportation of coal by road. Along with this continuous water sprinkling shall be done on the coal transportation road for dust suppression.
1.7	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 is regularly carried out.
1.8	Dedicated concrete Road with 12-mt width, away from the villages and sensitive location like school and hospitals shall be constructed to transport the coal prior to the start of the mining operation.

S. No	EC Conditions
1.9	The budget proposed for PH is Rs 800 Lakhs (capital expenditure) and Rs. 47 Lakhs (recurring expenditure). 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 3 years from the date of grant of EC. PP shall submit the progress report regarding the implementation of action plan to concerned RO along with the six monthly compliance report.
1.10	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 2361.1 Lakhs (Capital) and Rs 275.86 Lakhs (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 year.
1.11	<p>Project proponent shall implement the following additional environmental safeguards for the project being in SPA:</p> <ul style="list-style-type: none"> a) A dedicated coal transport corridor shall be constructed in IB Valley Coalfields. b) Reservoir shall be created for storage of mine drainage water and run off which can be used for industrial purpose. c) Surface miner for coal mining purpose shall be used. d) Concurrent mine filling shall be done with dry ash from the thermal power plants. e) Provision for supply of drinking water in the peripheral villages of coal mining area shall be made. f) Rake loading facility in the coal mines shall be enhanced. g) Mine voids shall be backfilled and mined-out area shall be restored. Accordingly an action plan shall be prepared. h) Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants. i) Effective fugitive emission control measures should be imposed in the process, transportation, packing, etc.
1.12	Project proponent shall deposit the budget of Rs. 31.05 crores proposed for wildlife conservation plan with the competent authority within 6 months from the date of grant of EC.
1.13	Capital cost of Rs. 216.83 crore as part of Mining Closure activities shall be implemented concurrently with stipulation given in mine plan. All the agricultural land shall be restored as part of Mining Closure activities & it is required to be implemented concurrently with stipulation given in mine plan.
1.14	Project proponent shall develop greenbelt/ plantation at conceptual stage on 329.81 ha of backfilled area, 168.69 ha on Excavated void, 28.87 ha on Road & infrastructure, 7.50 ha on garland drains, 1.28 ha on settling pond and Greenbelt on 17.62 ha along the 7.5m lease periphery. Hence, total 553.77 ha land shall be covered under plantation (including greenbelt) in phases till conceptual stage. Local and fruit bearing species shall be planted. The survival rate shall be maintained to 90%. Further, PP shall develop 3 – tier plantation on both the sides of the transportation road with the native species. Along with this, PP shall also carryout community plantation in the villages on the transportation route and other nearby villages, with atleast 50,000 saplings of fruit bearing species of height not less than 2 meter.
1.15	Project proponent shall develop Miyawaki Plantation in the greenbelt area of 17.62 ha. Additionally, 97000 saplings shall be planted along with additional budget of Rs. 300 lakhs, as committed.

S. No	EC Conditions
1.16	Pond exists at the ML boundary shall be protected from the Mine activities and plan be drawn for rejuvenation. Efforts shall be made to maintain the ecology of ponds (within and outside the mine lease in vicinity) with regular desilting and cleaning as a part of capital investment out public hearing and be continued from CSR budget.
1.17	As proposed, 5 water harvesting pond shall be created separately to recharging the ground water and usage of project affected families. Further, a pond (at mine lease boundary) shall be protected with fencing by an opening for villagers for fish culture if required and for livestock. Along boundaries a 5 m thick plantation shall be developed.
1.18	Project proponent shall monitor regularly water levels in open dug wells located in village and by establishing Piezometer to ascertain the impact of mining over ground water table and to plan mitigative measures to recharge the area.
1.19	Garland drains (2mX3m) or of adequate size shall be provided at the toe of the benches to arrest discharge and runoff with silt and sediments surging into areas adjoining the periphery of Overburden dump, which will be regularly cleaned before the onset of monsoon every year.
1.20	Check dams shall be constructed at required locations within drains to arrest eroded materials and settling ponds shall be constructed to treat mine discharge water inside the mine block.
1.21	Proper profiling of working benches of pits and dumps shall be done to channelize water in garland drains & sumps.
1.22	Waste generated from the domestic use shall be treated in STP and the treated water will be utilized in plantation & greenbelt development. Wastewater from the HEMM washing/workshop will be treated in ETP. After treatment, water will be reused in washing of HEMM, dust suppression and greenbelt development.
1.23	PP shall install 4 Continuous Ambient Air Quality Monitoring Stations for the said project, 2 each in the core zone and the buffer zone. The real time data so generated shall be uploaded on company website and linked it with website of CPCB & SPCB. In addition, data should also be displayed digitally at entry and exit gate of mine lease area for public display.
1.24	Dumping of OB shall maintain distance of about 200 mts from any of villages and additional Greenbelt development/plantation (atleast 8 to 10 ft trees) shall be carried out at the periphery of the mine lease area as well as in the adjacent area of village.
1.25	Project proponent shall limit the activities of mining in its mine lease area only. No OB Dumping and infrastructure activity should be proposed and dumped on forest land. Accordingly revised Mine Plan should be submitted (if required) and submitted to Ministry.
1.26	Project proponent shall make use of advanced computer simulation techniques for design and execution of blasting operation in the mine. PP shall make use of Electronic Delay Detonators for optimal blasting in coal and OB rock to minimize the environmental impacts of blasting such as ground vibration, fly rocks and excessive dust generation.
1.27	Project proponent shall deploy atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of coal/OB etc.

S. No	EC Conditions
1.28	Project proponent shall reduce the carbon footprint after sequestration of CO ₂ . IRO will review the progress of CO ₂ sequestration. The process of sequestration of CO ₂ will include the planting trees, by "Developing carbon capture and storage (CCS) technologies" and implementation of renewable energy. Further, PP shall carry out enough plantation to ensure carbon sequestration lost due to deforestation and other fossil fuel based activities.
1.29	Rehabilitation and Resettlement of the 6 villages falling within the ML area shall be completed in a time bound manner and the R&R amount as per the approved R&R plan shall be deposited with the State Government.
1.30	Project proponent shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extant rules or norms.
1.31	Project proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non-compliance or infringement should be reported to the concerned authority.
1.32	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.
1.33	Project proponent shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the Fly Ash Utilization Notification, 2021.
1.34	Project proponent 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 ML 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.
1.35	Project proponent shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to RO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System.
1.36	Third-party audit (by NEERI/CIMFR/IIT/NITs) for air & water quality shall be carried out annually

S. No	EC Conditions
	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.
1.37	Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
1.38	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.

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 at any given time shall not exceed the limit as prescribed in the EC.
1.5	Validity of EC 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 8 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.

S. No	EC Conditions
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 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 centers.
2.7	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.
2.8	The raw coal shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
2.9	PP shall submit an action plan for using and developing Renewable Energy for its consumption in its utilities/machinery/equipment instead of using electricity from Grid/generated from Thermal Power Plants. PP shall Install additional solar power generation units of at-least 2 MW.

3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	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.
3.2	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.
3.3	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
3.4	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
3.5	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

S. No	EC Conditions
	installed before discharge of workshop effluent. Sewage treatment plant (STP) of adequate capacity shall be installed for treatment of domestic wastewater.
3.6	An integrated surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations and coal washery shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
3.7	The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
3.8	Construction of Sewage Treatment Plant (STP)/Effluent treatment Plant (ETP) with latest technology should be completed within 2 years and 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, Forest and Climate Change (MoEF&CC).
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).

S. No	EC Conditions
5.5	Environmental conditions of mining place shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
5.6	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.

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 (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
6.2	Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, 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 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.
6.4	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.
6.5	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.
6.6	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'.
7.7	PP should conduct epidemiology study for analysis of the distribution, patterns and determinants of health and disease conditions in defined populations.

8. Corporate Environment Responsibility

S. No	EC Conditions
8.1	The company shall have a well laid down environmental policy duly approved 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.
8.3	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

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.
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

S. No	EC Conditions
	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.

