

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IMPACT ASSESSMENT DIVISION)
NON-COAL MINING SECTOR**

SUMMARY RECORD OF 11TH MEETING OF THE COMMITTEE OF THE RE-CONSTITUTION OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 11th meeting of the Re-constitution of Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 1-2 March, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC, discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 10th EAC meeting held on 8th February, 2023:

The minutes of the 10th EAC meeting held on 8th February, 2023 were placed before the members of the EAC.

Day 1: 1st March, 2023 (Wednesday)

1.1 Pottangi Bauxite Mine of M/s National Aluminium Company Limited (NALCO) with Production Capacity of 3.5 Million TPA (ROM), Top Soil - 0.047 Million TPA, Over Burden - 0.346 Million TPA, (Total Excavation - 3.893 Million TPA) along with crusher of 900 TPH in the mine lease area of 697.979 ha, located at Pottangi Village, Pottangi Tehsil, Koraput District, Odisha - [F.No: IA-J-11015/8/2018-IA-II(M), Proposal no: IA/OR/MIN/416699/2023; Consultant: Re Sustainability Solutions Private Limited (Formerly known as Ramky Enviro Service Private Limited)] – Reconsideration of Environmental Clearance (EC)

The instant proposal is for mining of Bauxite in Pottangi Bauxite Mine of M/s National Aluminium Company Limited (NALCO) with Production Capacity of 3.5 Million TPA (ROM), Top Soil - 0.047 Million TPA, Over Burden - 0.346 Million TPA, (Total Excavation - 3.893 Million TPA) along with crusher of 900 TPH in the mine lease area of 697.979 ha, located at Pottangi Village, Pottangi Tehsil, Koraput District, Odisha.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 18°34'31.130" to 18°37'06.481" N and Longitude 82°57'08.053" to 82°59'49.967"E. The mine lease

- area falls under the Survey of India Toposheet No E44 K/14, E44K/15, E44L/2, and E44 L/3 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals under Category “A” of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at the Central level.
 - iii. The proposal was initially considered in the EAC (Non-Coal Mining) meeting held during 23-25 Sep, 2020 wherein the EAC after detailed deliberations deferred the proposal. Then, the Project Proponent submitted the information on 07.04.2021 and accordingly the proposal was again considered in the EAC meeting held during 28th June and 1st July 2021. During the EAC meeting, the EAC noted that the total lease area of 697.979 ha is a forest land and Project Proponent has not obtained the Stage-I Forest Clearance yet. Hence, the Committee was of the view that the proposal cannot be considered and PP shall approach the Ministry after obtaining Stage-I Forest Clearance. Therefore, the Committee returned the proposal in present form. Now, the Project Proponent has submitted a fresh proposal for Environmental Clearance (EC) along with the ‘in principle’ approval granted by the MoEF&CC vide F.No: 8-17/2022-FC dated 10.01.2023 under Section - 2 of the Forest (Conservation) Act, 1980 for non-forestry use of 697.979 ha of forest land for Pottangi Bauxite Mining Lease in village Pottangi of Koraput Forest Division under Pottangi Tahasil of Koraput District, Odisha by M/s NALCO Ltd. Accordingly, the proposal was reconsidered in the 11th EAC (Non-Coal Mining) meeting held during 1-2 March, 2023.

Based on observation of EAC, compliance of observation of EAC in its meeting held during 28th June and 1st July 2021 and 23-25 Sep, 2020 made by Project Proponent are detailed below:

S. No	Observation of EAC in its meeting held during 28 th June and 1 st July 2021	Reply by Project Proponent
1	The EAC noted that the total lease area of 697.979 ha is a forest land and Project Proponent has not obtained the Stage-I Forest Clearance yet. Hence, the Committee was of the view that the proposal cannot be considered and PP shall approach the Ministry after obtaining Stage-I	The Project Proponent has submitted the copy of the ‘in principle’ approval granted by the MoEF&CC vide F.No: 8-17/2022-FC dated 10.01.2023 under Section - 2 of the Forest (Conservation) Act, 1980 for non-forestry use of 697.979 ha of forest land for Pottangi Bauxite Mining Lease in village Pottangi of Koraput Forest Division under Pottangi Tahasil of Koraput District, Odisha by M/s NALCO Ltd.

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1	Impacts of mining activity and transportation of mining material on villages / Habitat / settlements along with the mitigation plan.	<p>PP submitted that OB will be transported by dumpers to respective OB dumps/internal dumps Haul road has been provided for movement of dumpers The transport of the bauxite/OB within the lease area will be carried out by dumper truck. Different grades of Bauxite from different faces will be blended into the primary crusher at mine and dispatched to the Alumina Refinery Plant through the Conveyor belt system. Most of the air pollution problems are due to fugitive dust emission, which is more prominent in open cast mines in comparison to underground mines. The maximum incremental Ground Level Concentration due to mining are superimposed on the 98th percentile baseline PM10 and PM2.5 concentrations to calculate the likely resultant concentrations after implementation of the proposed mining. The values of resultant GLC at different locations are given below:</p> <table border="1"> <thead> <tr> <th rowspan="2">Code</th> <th rowspan="2">Particulars Locations</th> <th colspan="3">Particulate matter (PM₁₀) µg/m³</th> </tr> <tr> <th>Baseline scenario (max)</th> <th>Predicted GLC (max with EMP)</th> <th>Future predicted baseline values (max)</th> </tr> </thead> <tbody> <tr> <td>A2</td> <td>Malkarbandha</td> <td>46.9</td> <td>6.1</td> <td>53</td> </tr> <tr> <td>A3</td> <td>Pottangi</td> <td>55.4</td> <td>1</td> <td>56.4</td> </tr> <tr> <td>A6</td> <td>Matiagurha</td> <td>45.2</td> <td>1</td> <td>46.2</td> </tr> <tr> <td>A7</td> <td>Sharagigurha</td> <td>48.2</td> <td>1</td> <td>49.1</td> </tr> <tr> <td>A8</td> <td>Kunduli</td> <td>53.4</td> <td>1</td> <td>54.4</td> </tr> <tr> <td rowspan="2">NAAQ stds. (2009)</td> <td>24 hourly</td> <td colspan="3">100 µg/m³</td> </tr> <tr> <td>Annual</td> <td colspan="3">60 µg/m³</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">Code</th> <th rowspan="2">Particulars Locations</th> <th colspan="3">Particulate matter (PM_{2.5}) µg/m³</th> </tr> <tr> <th>Baseline scenario (max)</th> <th>Predicted GLC (max with EMP)</th> <th>Future predicted baseline values (max)</th> </tr> </thead> <tbody> <tr> <td>A2</td> <td>Malkarbandha</td> <td>32.2</td> <td>3.6</td> <td>35.8</td> </tr> <tr> <td>A3</td> <td>Pottangi</td> <td>38.2</td> <td>0</td> <td>38.2</td> </tr> <tr> <td>A6</td> <td>Matiagurha</td> <td>28.9</td> <td>0</td> <td>28.9</td> </tr> <tr> <td>A7</td> <td>Sharagigurha</td> <td>32.8</td> <td>0</td> <td>32.8</td> </tr> <tr> <td>A8</td> <td>Kunduli</td> <td>36.5</td> <td>0</td> <td>36.5</td> </tr> <tr> <td>NAAQ</td> <td>24 hourly</td> <td colspan="3">60 µg/m³</td> </tr> </tbody> </table>	Code	Particulars Locations	Particulate matter (PM ₁₀) µg/m ³			Baseline scenario (max)	Predicted GLC (max with EMP)	Future predicted baseline values (max)	A2	Malkarbandha	46.9	6.1	53	A3	Pottangi	55.4	1	56.4	A6	Matiagurha	45.2	1	46.2	A7	Sharagigurha	48.2	1	49.1	A8	Kunduli	53.4	1	54.4	NAAQ stds. (2009)	24 hourly	100 µg/m ³			Annual	60 µg/m ³			Code	Particulars Locations	Particulate matter (PM _{2.5}) µg/m ³			Baseline scenario (max)	Predicted GLC (max with EMP)	Future predicted baseline values (max)	A2	Malkarbandha	32.2	3.6	35.8	A3	Pottangi	38.2	0	38.2	A6	Matiagurha	28.9	0	28.9	A7	Sharagigurha	32.8	0	32.8	A8	Kunduli	36.5	0	36.5	NAAQ	24 hourly	60 µg/m ³		
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		The future predicted baseline values are well within the AAQ 2009 standards of CPCB.		
2	Ground vibration study through authorized agencies and the results are to be compared with the limiting values prescribed by Director General of Mine Safety (DGMS).	PP submitted that after obtaining environmental clearance and other statutory clearances, while mining activity is in progress along with drilling-blasting activity, ground vibration study will be carried out through authorized agencies and the results will be compared with limiting values prescribed by Director General of Mines Safety (DGMS). Necessary precautions and control measures will be taken during drilling mining and blasting activities to see that the ground vibrations do not to exceed the specified DGMS standards.		
3	Incremental value of PM 2.5 in worst case scenario considering the nearest villages.	PP submitted that the maximum incremental values of PM _{2.5} in worst case scenario were assessed to be 7.8 µg/m ³ at a distance of 0.5 km in west. The worst case baseline value during study period is 38.2 µg/m ³ . So, the max incremental value in the nearest villages is estimated to be 7.8 µg/m ³ . PP also submitted that the max incremental value under control condition is found to be 3.6 µg/m ³ and cumulative Ground Level Concentration of PM _{2.5} under control condition is found to be 14.8 µg/m ³ .		
4	Statement about compliance of guidelines issued by the Central Ground Water Authority and directions of Hon'ble NGT in application no. OA No. 176/2015.	PP submitted that the Central Ground Water Authority has been regulating ground water development and management by way of issuing 'No Objection Certificates' for ground water extraction to industries or infrastructure projects or Mining Projects etc., and framed guidelines in this connection from time to time applicable in twenty two States and two Union territories, where ground water development is not being regulated by the State Government and Union territory administration concerned. The following guidelines are issued in the Gazette Notification dated 24 th September 2020 by CGWA for Mining projects. All existing as well as new mining projects will be required to obtain No Objection Certificate for ground water abstraction. Since mining projects are location specific, there will be no ban on grant of No Objection Certificate for abstraction of ground water for such projects in over-exploited assessment units. After detailed hydrological survey, it was found that required 700 KLD surface water available near		

		<p>project site (Totajhola Nallah located at 1.4 km aerial distance), necessary approval from Industrial Promotion and Investment Corporation of Odisha Limited (IPICOL), Government of Odisha has been obtained. Single window permission for 0.286 cu.sec (700 KLD) surface water withdrawal received from IPICOL, Govt. of Odisha.</p> <p>Further, PP submitted that the proposal of NALCO to make application for 0.286 cu.sec water for Pottangi Bauxite mines was discussed in 220th SLFC meeting held on 26th April, 2022 and SLFC has recommended 0.286 cu.sec of water as sought by the NALCO. Hence NOC from CGWA is not applicable.</p>
5	List of flora and fauna duly authenticated by the State forest department clearly indicating the Schedule of the species.	PP submitted the list of Flora and Fauna duly authenticated by Divisional Forest Officer, Koraput Division from Office of The Divisional Forest Officer-Cum-Wildlife Warden, Koraput Forest Division vide letter no 186 dated 07.01.2021.
6	Impact assessment study for proposed activity on Kunduli River located at the distance of 3.5 Km from the project site.	<p>PP submitted that the major stream courses are: Pottangi nala at 2 km south, Kunduli nala at 3.5 km north, Boduru gedda at 7.5 km east. During the study, it was observed that, there are streams originating and flowing down the hill-side, they are of first- and second-order types (at the project site surroundings). Based on the topography, a watershed boundary was delineated. The project core area is falling in three stream catchments (or watersheds), they are Kanduli Nala, Pottangi Nala and Boduru Gedda streams. The entire drainage area of Kunduli nala is computed as 85 square km approximately. The discharge or flow rate of the main stream is estimated as 185 cu.m/sec. The rate is less than the total surface runoff volume generated during heavy rain in the entire catchment.</p> <p>PP submitted that It is anticipated that there will not be any major impact on water quality of surrounding surface water bodies and no seepage water. Mine working depth will be above ground level, garland drains and toe-walls around dumps will be constructed to prevent and control the surface runoff from project area. There will be no occurrence of discharge of water mixed with acid from the surface of the mine lease area as no acidic material will be present in the mining area. The overburden, mine waste and wastewater will be managed.</p> <p>Surface runoff water around the mine shall be</p>

		diverted into the natural drainage course through garland drains located sufficiently ahead of laterite face. Stone masonry check dam, retaining walls shall be constructed to prevent soil erosion and sedimentation, water pollution to downstream water bodies. Regarding surface drainage in the project site area, it is observed that, most part of the mine lease area is situated on an elevated upland (hill) with respect to the surroundings, and is on a water divide portion, hydrologically. A few first and second order streams are emerging from this higher elevated area, flowing down the hill. The streams running off from this surface area drain down in different directions, exhibiting dendritic drainage pattern. The flow of water is ephemeral. After coursing further following the gradient of the land, they will join with major streams and finally confluence with the Kolab River (main stream part).																																						
7	Clarification about ESZ due to tribal settlement & mitigations plan	<p>PP submitted that there is no ESZ within the 10 km radius of the study area. Some of the Hamlets are existing in the buffer zone.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Pottangi village</td> <td>1.50</td> <td>S</td> </tr> <tr> <td>State Boundary</td> <td>0.25</td> <td>E</td> </tr> <tr> <td>Rallagedda RF</td> <td>9.10</td> <td>S</td> </tr> <tr> <td>Tangini RF</td> <td>9.70</td> <td>SE</td> </tr> <tr> <td>Jodimadu RF</td> <td>10.2</td> <td>S</td> </tr> <tr> <td>Nanda RF</td> <td>11.2</td> <td>E</td> </tr> <tr> <td>Duggeru RF</td> <td>14.2</td> <td>NE</td> </tr> <tr> <td>Pitaguru PF</td> <td>14.5</td> <td>W</td> </tr> <tr> <td>Dushura RF</td> <td>14.5</td> <td>W</td> </tr> </tbody> </table>	Name	Distance (km)	Direction	Pottangi village	1.50	S	State Boundary	0.25	E	Rallagedda RF	9.10	S	Tangini RF	9.70	SE	Jodimadu RF	10.2	S	Nanda RF	11.2	E	Duggeru RF	14.2	NE	Pitaguru PF	14.5	W	Dushura RF	14.5	W								
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9	Conceptual plan along with the post mining land use.	PP submitted that out of total lease area 697.979 ha, at the conceptual stage, mining area will be 354.777 ha, Infrastructure will be 28.326 ha, Power Corridor will be 12.40 ha, Primary Crusher/Conveyor belt (including temporary mineral stocks) will be 10.23 ha, roads will be 8.139 ha and Safety zone/Green belt will be 284.107 ha																																						
10	A copy of clearance	PP informed that issuance of Clearance Certificate																																						

	certificate from the District Collector under Forest Right Act 2006.	under Forest Right Act, 2006 is pending with District Collector.																															
11	Status of stage- I Forest Clearance	The Project Proponent has submitted the copy of the 'in principle' approval granted by the MoEF&CC vide F.No: 8-17/2022-FC dated 10.01.2023 under Section - 2 of the Forest (Conservation) Act, 1980 for non-forestry use of 697.979 ha of forest land for Pottangi Bauxite Mining Lease in village Pottangi of Koraput Forest Division under Pottangi Tahasil of Koraput District, Odisha by M/s NALCO Ltd. PP also submitted that NPV and CA cost (Rs. 200 cr.) has been deposited with no. 5829981389 dated 31.01.2023																															
12	3-year action plan for Green belt development with a plantation rate sapling/year.	<p>PP submitted that the mined out areas will be backfilled and reclaimed with dense poly-culture plantation of the local species.</p> <table border="1"> <thead> <tr> <th rowspan="2">S.No</th> <th rowspan="2">Particulars</th> <th colspan="2">Lease periphery</th> <th rowspan="2">Remarks</th> </tr> <tr> <th>No. of saplings</th> <th>Area in ha</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1st Year</td> <td>14400</td> <td>5.76</td> <td>South & Central Block safety zone</td> </tr> <tr> <td>2</td> <td>2nd Year</td> <td>22675</td> <td>9.07</td> <td>North & West ext. safety zone</td> </tr> <tr> <td>3</td> <td>3rd Year</td> <td>21425</td> <td>8.57</td> <td>East ext. safety zone</td> </tr> <tr> <td>4</td> <td>4th Year</td> <td>14050</td> <td>5.62</td> <td rowspan="2">Part backfilled area</td> </tr> <tr> <td>5</td> <td>5th Year</td> <td>32300</td> <td>12.92</td> </tr> </tbody> </table> <p>Source: Approved Mining Plan</p>	S.No	Particulars	Lease periphery		Remarks	No. of saplings	Area in ha	1	1 st Year	14400	5.76	South & Central Block safety zone	2	2 nd Year	22675	9.07	North & West ext. safety zone	3	3 rd Year	21425	8.57	East ext. safety zone	4	4 th Year	14050	5.62	Part backfilled area	5	5 th Year	32300	12.92
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13	Impact analysis of DG sets	PP submitted that 3 generators of each 1500 kVA are installed at the site. The cumulative power generating capacity of the 3 units is 4500 kVA of power at peak period. The pollutants emitted by a DG set consist of Particulate Matter (PM), Sulphur-di-oxide (SO ₂), Nitrogen Oxides (NO _x) and Carbon Monoxide (CO). The max. incremental short term 24 hourly GLC's for PM, SO ₂ , NO _x & CO likely to be encountered due to DG sets are 0.14 µg/m ³ , 0.02 µg/m ³ , 5.5 µg/m ³ , 0.28 µg/m ³ occurring at a distance of 0.5 km in West direction. The predictions indicate that the concentrations of PM: 55.54 µg/m ³ , SO ₂ : 14.22 µg/m ³ , NO _x : 28.70 µg/m ³ & CO: 650.28 µg/m ³ well within the predicted limit for residential and rural zone. Based on the above it can be inferred that the ambient air quality in the study area is unlikely to be affected due to the proposed mining project.																															
14	Proof of submission of Conservation plan to CWLW for Schedule-1 species, if any.	PP submitted that as per the authenticated list of flora fauna duly signed by the DFO Koraput, Peafowl (<i>Pavo cristatus</i>) and Sloth Bear (<i>Melursus ursinus</i>) have been identified as Schedule – 1 species in Koraput area. Accordingly, a conservation plan for the protection and conservation of Peafowl and																															

		Sloth bear in Koraput area is prepared and submitted to Divisional Forest Officer, Koraput Division on 17.02.2021 for approval. Then, Power point presentation made on 30.12.2022 to PCCF, Wildlife, Odisha. Revised SSWLCP has been submitted to PCCF, Bhubaneswar by the Office of the Regional Chief Conservator of Forest, Koraput Circle on 15.02.2023, with revised cost of Rs. 14.35 Cr.
15	Video recording of the Public Hearing proceedings along with time bound action plan for implementation of the activities committed during public hearing in terms of O.M. No. 22-65/2017- IA.III dated 30th September, 2020.	PP submitted that the entire activities proposed under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report, and to the District Collector (DC), and displayed in the website of the project proponent. PP allocated budget of Rs 7.2 Crores over a period of 5 years to address the concerns of public hearing issues.
16	Affidavit by way of undertaking as required as per Ministry's Office Memorandum No.3-50/2017--IA. II(M) dated 30.05.2018.	PP submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing K 942431 dated September, 2020 stating that the NALCO hereby undertake to comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Others.
17	Submission of Mining Plan in the Parivesh portal.	PP uploaded the Mining Plan in the Parivesh portal.

iv. The Project Proponent obtained the Terms of Reference (ToR) vide ToR Lr. No: J-11015/08/2018-IA.II(M) dated 28.06.2018 and ToR was valid upto 27.06.2021.

v. Lease Details:

- a) The State Govt. vide letter No.5734/SM, dated 12.7.2016 have issued terms & conditions for grant of mine lease in favour of M/s NALCO for Bauxite over an area of 1738.04 ha in Pottangi Tahasil of Koraput District reserved in its favour under section 17A(1A) of MMDR Act,1957 vide Notification No. GSR 314(E), dated 27.04.2007 and No. GSR 411(E), dated 27.04.2017, both issued by the Ministry of Mines. The said terms and conditions have been duly accepted by PP vide its letter No.NBC/ED(R&T)/1556/2016 dated 27.12.2016.
- b) Then, the PP has requested for reduction of the area from 1738.04 Ha to 697.979 Ha vide its letter No.CMD/269 dated 30.10.2017.

- c) Thereafter, the Ministry of Mines vide Notification No.GSR 255(E), dated 21.03.2018, in supersession of its earlier notifications has reserved an area of 697.979 ha under section 17 A (1A) of MMDR Act,1957 for undertaking prospecting or mining operation through M/s NALCO till 26.04.2022.
- d) Therefore, the State Government, in supersession of this letter No.5734/SM dated 12.07.2016 have issued fresh LOI over the reduced area of 697.979 Ha for grant of ML vide Letter No. 3794/SM, Bhubaneswar dated 14.05.2018. The issued Lol was accepted by the PP on 14.05.2018.
- e) Further, PP submitted that the State Govt. vide Order no: 2391/SM, dated 15.03.2022 have extended the reservation period by one year i.e. upto 25.04.2023 u/s 17A of the MMDR (Amendment) Act, 2021 in respect of this mines with the recommendation of Central Govt. vide letter dated 04.03.2022.
- f) Then, the Govt. of Odisha, Dept. of Steel and Mines vide Order No: 1029/SM-MC2-MC-0055-2020/SM, Bhubaneswar dated 02.02.2023 have granted the mining lease for a period of 50 years.

vi. Land Use/Land Cover of the Mine Lease Area:

Forest land	697.979 ha
Total Mining lease area (MLA)	697.979 ha

vii. Mining Plan details:

Mining Plan approved by Indian Bureau of Mines	Letter No.	MP/FM/13-ORI/BHU/2018-19
	Date	27.07.2018
	Mineral	Bauxite
	ML area	697.979 ha
	Validity	5 years
Mining Parameters	Quantitative Description	
Method of Mining	Open cast mechanized mining	
Bench Height	8m	
Bench Width	15-200m	
Geological Reserves	111.794 MT	
Mineable Reserves	110.400 MT	
Life of mine	32 years	
Overall pit slope	45°	
ROM Output size	-150 mm	
Transportation details	The mined out bauxite will be transported through dumpers to crushers unit (900tph) for crushing to 150mm size and this crushed ore will be sent by conveyor mode of transportation to NALCO's Aluminum refinery located at Damanjodi.	
Dumper's capacity	50 and 55 Ton	
Topsoil	Topsoil dumping will be in stages of 8m over an area of 1.40 ha during first year with a designed capacity of 1.38 lakh tons. During second year dumping will be over an area of 1.37 ha with a designed capacity of 1.35 lakh	

	tons. During third year it will be over an area of 2.11 ha from with a designed capacity of 6.41 lakh tons.
Waste generation	Waste dumping will be in stages of 08 m over an area of 2.44 ha. In first year with a designed capacity of 1.60 lakh tons. During second year dumping will be over an area of 2.41 ha with a designed capacity of 2.46 lakh tons. During third year it will be over an area of 2.02 ha from with a designed capacity of 2.12 lakh tons.
Ground water level	140-150m bgl (Min. 1226 mRL & Max. 1216 mRL)
Depth of mining	40m bgl
Ground water intersection	No

viii. Water requirement:

Total water requirement	700KLD	Mines road sprinkling	525.0 KLD
		Industrial (mining activity) use	75.0 KLD
		Green belt	60.0 KLD
		Drinking and Sanitation	40.0 KLD
Source	Bore wells in the banks of the Kunduli Nala or other nalas in the periphery of Pottangi Mines		
Permission	<p>Application vide 21-4/2509/OR/MIN/2020; date: 05.07.2020 submitted to CGWA for obtaining NOC/Permission for abstraction of ground water.</p> <p>After detailed hydrological survey, it was found that required 700 KLD surface water available near project site (Totajhola Nallah located at 1.4 km aerial distance), necessary approval from Industrial Promotion and Investment Corporation of Odisha Limited (IPICOL), Government of Odisha has been obtained. Single window permission for 0.286 cu.sec (700 KLD) surface water withdrawal received from IPICOL, Govt. of Odisha.</p> <p>Further, PP submitted that the proposal of NALCO to make application for 0.286 cu.sec water for Pottangi Bauxite mines was discussed in 220th SLFC meeting held on 26th April, 2022 and SLFC has recommended 0.286 cu.sec of water as sought by the NALCO. Hence NOC from CGWA is not applicable.</p>		

ix. Nearest village / town/ highway/railway station / water bodies/Forest:

Particulars	Distance	Direction
Pottangi Village	1.2 km	SE
Damanjodi Town	18 km	NNW
Koraput District Head quarter	40 km	NW
Damanjodi Railway Station	18 km	NNW
National Highway NH-43	1.5 km	S
Water bodies		
Totajhola Nala	0.5 km	SE
Pottangi Nala	2.0 km	S
Kunduli Nala	3.5 km	N

Reserve Forest		
Rallagedda RF	9.1 km	S
Tangini RF	9.7 km	SE

x. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/ letter/ Remarks
Forest Land	No	FP/OR/MIN/29981/2017 dated 01.11.2017. PP informed that Forest Diversion Proposal (FDP) is pending with PCCF (Nodal), Government of Odisha since 08.03.2021 Issuance of Clearance Certificate for Forest Right Act, 2006 is pending with District Collector
National park	No	The Project Proponent submitted that there are no National parks, Sanctuaries, Biosphere Reserves, Wildlife Corridor, Tiger/Elephant reserve in the study area of 10 Km radius surrounding the mine lease area.
Wildlife Sanctuary	No	
Biosphere Reserves / Tiger Reserves	No	
Wildlife Corridors	No	
Schedule-I species	Yes	Peafowl (<i>Pavo cristatus</i>) and Sloth Bear (<i>Melursus ursinus</i>) PP submitted the list of Flora and Fauna duly authenticated by Divisional Forest Officer, Koraput Division from Office of The Divisional Forest Officer-Cum-Wildlife Warden, Koraput Forest Division vide letter no 186 dated 07.01.2021.
Wildlife Conservation Plan	No	PP submitted that as per the authenticated list of flora fauna duly signed by the DFO Koraput, Peafowl (<i>Pavo cristatus</i>) and Sloth Bear (<i>Melursus ursinus</i>) have been identified as Schedule – 1 species in Koraput area. Accordingly, a conservation plan for the protection and conservation of Peafowl and Sloth bear in Koraput area is prepared and submitted to Divisional Forest Officer, Koraput Division on 17.02.2021 for approval. Then, Power point presentation made on 30.12.2022 to PCCF, Wildlife, Odisha. Revised SSWLCP has been submitted to PCCF, Bhubaneswar by

		the Office of the Regional Chief Conservator of Forest, Koraput Circle on 15.02.2023, with revised cost of Rs. 14.35 Cr.
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xi. Green belt/plantation details:

Particulars for Green belt/plantation	Area covered (in Ha)
Proposed area for green belt/plantation	284.11 ha
Total no. of plants	101750 no.s
Budget for green plant & plantation till the end of life of mine	Rs. 30 Cr (Capital) and Rs 3 Cr (Recurring)

xii. Baseline details:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	03.09.2018 to 30.11.2018		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-monsoon		
Predominant wind direction	E and NE (from)		
Ambient Air Quality (8 locations)	The Project Proponent reported that the air quality concentrations of PM _{2.5} and PM ₁₀ for all the 8 AAQM stations were found between 21.1 to 38.2µg/m ³ and 35.8 to 55.4 µg/m ³ respectively. The concentrations of NO ₂ and SO ₂ were found to be in range of 14.3 to 23.2 µg/m ³ and 4.8 to 14.2 µg/m ³ respectively.		
Noise level (8 locations)	Noise levels varied from 50.3 to 54.2 Leq dB(A) during day time and from 40.7 to 43.9 Leq dB(A) during night time.		
Water Quality	Parameters	Surface water (2 locations)	Ground water (8 locations)
	pH at 25°C	7.6-7.77	6.5-7.4
	Total Dissolved Solids, mg/l	76-83	65-850
	Chloride as Cl ⁻ , mg/l	10-22	10-254
	Total Hardness, mg/l	36-40	-
	DO, mg/l	5.2-5.4	-
	BOD, mg/l	8-12	-
	Fluoride as F, mg/l	0.5	0.5-1.82
Soil quality (9 locations)	Parameters	Observed Values	
	pH	6.4 – 7.1	
	Electrical Conductivity (µS/cm)	117-163	
	Organic Carbon (%)	0.07-0.47	
	Available Nitrogen as N (Kg/Ha)	157-345	
	Available Phosphorus (Kg/Ha)	12.1-35.8	
Available Potassium (K)	22-376		

Traffic Study	PP reported that the traffic study was carried out on NH-26 near Pottangi village (connecting Raipur - Balangir - Vizianagaram) which is the main road connecting to proposed project area. As per traffic survey, the no. of PCU's during peak hour is 470 numbers and the Level of service is found to be very good i.e., the V/C ratio is 0.31.
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xiii. Public Hearing (PH) Details:

Advertisement for PH with date	05.11.2019
Date of PH	17.12.2019
Venue	Mini Stadium, Pottangi
Chaired by	i. Sri Deben Kumar Pradhan, OAS (S.A.G), Additional District Magistrate, Koraput ii. Er P Kar, Regional Officer, State Pollution Control Board, Rayagada
Issues raised during PH	Infrastructure development, Employment Opportunities to surrounding local people CSR implementation, and peripheral development.
Budget proposed for addressing issues raised during PH	Rs 7.2 Crores

xiv. Rehabilitation and Resettlement (R&R)

Particulars	Details
R & R Plan	The Project Proponent has submitted that no human settlements exist in the mine lease area; hence no displacement of any human habitat or any personal property is envisaged.

xv. Court case details

Court Case	The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
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xvi. Affidavit/Undertaking details

Project Proponent submitted an Undertaking	The Project Proponent has submitted an Undertaking stating that they hereby certified that the data and information presented in the EIA report is factually correct and they own the contents (information and date) of the EIA report.
Consultant submitted an Undertaking	The EIA/EMP report based on prescribed Terms of Reference issued by MoEF&CC vide Memo No. IA/OR/MIN/69870/2017 dated 28.06.2018 for the proposed Pottangi bauxite mine in Pottangi Village & Tehsil, Koraput Dist., Odisha. In this regard they hereby certified that the EIA/EMP reports prepared by them and data provided by laboratories including thier

	status of approvals presented in the report is factually correct. The laboratory used for analysis of samples is approved by NABL. MoEF&CC under EPA 1986 and rules made there under.
Affidavit as per Ministry's OM dated 30.05.2018	PP submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing K 942431 dated 21 st September, 2020 stating that the NALCO hereby undertake to comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Others.

xvii. Details of the EMP:

Activities	Capital Cost (Rs.In Crores)	Recurring (Rs. In Crores)
Air pollution control	10	1
Water pollution control	30	3
Noise pollution control	5	0.5
Pollution monitoring	20	2
Safety & health	15	1.5
Greenbelt development & Soil conservation measures etc...	30	3
Miscellaneous & Contingency expenses	10	
Total	120	12
EMP budget considered as 8.3% of the Total Project Cost and recurring cost considered 10% of EMP capital cost		

xviii. Details of project cost and employment:

Particulars	Budget (Rs. In Crores)
Budget for addressing the Public Hearing issues	Rs 7.2
EMP Cost	Rs 120
Recurring cost for EMP	Rs 12
Project Cost	Rs 1436.9
Employment	229 persons

3. Observation and Recommendation of the Committee: -

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area of 10km radius. The EAC asked about the status of the EIA Consultant as on date. The EIA Consultant informed the EAC that the NABET has revoked the debarred letter and gave permission to undertake the projects. The Project Proponent informed the EAC that the entire mine lease area of 697.979 ha is a forest land. Stage-I Forest Clearance was granted by the MoEF&CC vide F.No: 8-17/2022-FC dated 10.01.2023 under Section - 2 of the Forest (Conservation) Act,

1980 for non-forestry use of 697.979 ha of forest land. The EAC asked the Proponent to show the rivers and streams in the vicinity of the mine lease area. The Project Proponent informed the EAC that the major stream courses are Pottangi nala (2 km, S), Kunduli nala (3.5 km, N), Boduru gedda (7.5 km, E). During the study, it was observed that there are streams originating and flowing down the hill-side, they are of first- and second-order types (at the project site surroundings). The EAC asked the Project Proponent about the compensatory afforestation. The Project Proponent informed the EAC that an area of 1400 ha has been identified for the purpose of compensatory afforestation.

The Project Proponent informed the EAC that revised Site Specific Wildlife Conservation Plan has been submitted to PCCF, Bhubaneswar by the Office of the Regional Chief Conservator of Forest, Koraput Circle on 15.02.2023, with revised cost of Rs. 14.35 Cr and approval is awaited. The EAC asked the Project Proponent to upload the revised Wildlife Conservation Plan in Parivesh portal. The Project Proponent informed the EAC that single window permission for withdrawal of surface water was received from Industrial Promotion and Investment Corporation of Odisha Limited (IPICOL), Government of Odisha vide letter dated 30.04.2022 for withdrawal of 0.286 cu.sec (700 KLD) and hence the permission from CGWA is not applicable.

The EAC noted that the Project Proponent has not complied to the ADS point (ii) as sought by the EAC. The EAC asked the Project Proponent to conduct Ground vibration study through authorized agencies with similar geo-mining condition of the operating mine owned by PP. The EAC asked the Project Proponent about the movement of wildlife in the vicinity of the mine lease area. The Project Proponent informed the EAC there is no movement of wildlife observed in the mine lease area. The EAC asked the Project Proponent to submit the action plan to monitor the movement of wildlife in the vicinity of the mine lease area and also asked the Project Proponent to ensure the tiger corridors passing in the study area from Digital Support System (DSS) available in NTCA website. The Project Proponent informed the EAC that issuance of Clearance Certificate under Forest Right Act, 2006 has been issued by the District Collector. The EAC observed that the Project Proponent has not uploaded the FRA certificate in Parivesh. The EAC also noted that the Project Proponent has submitted the action plan to address the concerns of the public hearing over a period of 5 years. The EAC asked the Project Proponent to revise the timeline to 3 years for public hearing action plan. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the copy of Ground vibration study nearby mine operating by PP with similar geo mining conditions.
- ii. The Project Proponent needs to submit the action plan to monitor the movement of wildlife in the vicinity of the mine lease area and the Project Proponent needs to ensure the tiger corridors passing in the study area from Digital Support System (DSS) available in NTCA website.

- iii. The Project Proponent needs to submit the letter from the Forest Dept. regarding the presence of National parks, Sanctuaries, Biosphere Reserves, Wildlife Corridor, Tiger/ Elephant reserve in the study area of 10 km radius along with the authenticated map.
- iv. The Project Proponent needs to submit the action plan and timeline for installation and commission of crusher of 900 TPH.
- v. The Project Proponent needs to revise the timeline of action plan to address the concerns of the public hearing from 5 years to 3 years.
- vi. The Project Proponent needs to upload the revised Wildlife Conservation Plan in Parivesh portal.
- vii. The Project Proponent needs to upload the FRA certificate issued by the District Collector in Parivesh.
- viii. The Project Proponent needs to submit the undertaking regarding court case.
- ix. The Project Proponent needs to submit action plan for promotion of solar energy in the mine lease area.
- x. The Project Proponent needs to submit skill development plan for the work force.

1.2 Mevasa Bauxite (Aluminous Laterite) mine of M/s Shri Kaushikkumar Patel for mining of Bauxite (Aluminous Laterite) with production capacity of 1,49,248 TPA in the mine lease area of 8.7305 ha, located at Village Mevasa, Taluka Kalyapur, District DevbhumiDwarka, Gujarat - [F.No: IA-J11015/36/2022-IA-II(NCM), Proposal No: IA/GJ/MIN/289746/2022] - Terms of Reference (ToR)

The instant proposal is for grant of Terms of Reference (ToR)of M/s Shri Kaushikkumar Patel for mining of Bauxite (Aluminous Laterite) in Mevasa Bauxite (Aluminous Laterite) mine with production capacity of 1,49,248 TPA in the mine lease area of 8.7305 ha, located at Village Mevasa, Taluka Kalyapur, District Devbhumi Dwarka, Gujarat.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 22°15'6.86"N to 22°15'22.03" N & Longitude: 69°17'51.10"E to 69°18'7.59" E. The mine lease area falls under the Survey of India Toposheet No: F42 J08 and falls in Seismic Zone - IV.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as proposal attracts the general conditions as the Protected areas notified under the wildlife (Protection) Act, 1972 i.e., Marine Sanctuary, Gulf of Kutch,

Devbhumi Dwarka is located ~1.267 km from the mine lease area and appraised at the Central level.

iii. The proposal was earlier considered in the 4thEAC (Non-Coal Mining) meeting held during 28-29 September, 2022 wherein the EAC noted that the Project Proponent vide email dated 17.09.2022 sought deferment stating that the Project Proponent was not in a position to present themselves due to unforeseen circumstances. Therefore, the EAC deferred the proposal as per the request of the Project Proponent. Then, the Project Proponent vide letter dated 30.01.2023 requested this Ministry to enlist the proposal in the upcoming EAC meeting and accordingly the proposal was reconsidered in the 11th EAC (Non-Coal Mining) held during 1-2 March, 2023.

iv. Details of Mine lease of the project:

S. No	Lease Particulars	Date of Grant	Mineral	Mine Lease Area, Ha	Period	Granted by
1	Letter of Intent for grant of mining lease in pursuant to Rule 10 (2) of the Mineral (Auction) Rules, 2015 and this Letter of Intent is valid for a period of 3 years from the date of its issuance	30.06.2021	Bauxite (Aluminous Laterite)	8.7305 ha	50 years	Government of Gujarat

v. Land Use/Land Cover of the Mine lease area:

Private land	8.7305 Ha
Total Mine lease area (MLA)	8.7305 Ha

vi. Details of Mining Plan:

Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Letter No.	684(4)(1)/MP-401(370)/2021-22/GNR/160
	Dated	12.04.2022
	Mineral	Bauxite (Aluminous Laterite)
	Mine lease area	8.7305 Ha
	Validity	For a period of 5 years from the date of execution of mine lease deed
Mining Parameters	Quantitative Description	
Method of Mining	Opencast semi mechanized mining	

Geological Reserves	9,94,498 Tonnes
Mineable Reserves	6,95,530 Tonnes
Drilling/Blasting	No proposal of Drilling and Blasting
Life of mine	~ 5 years
Bench Height & Width	Each 5.0 m respectively
No. of Mine Benches	3
Existing Depth, m bgl	--
Individual bench slope	75°
Overall pit slope	45°
Ultimate Depth of Mining, m bgl	22.44
Ground Water Table, m bgl	28
Transportation details	Project Proponent submitted that the extracted Bauxite is transported to the end users by Trucks (Capacity of 20 Tonnes) through NH 947 via Mewasa village. Total distance of Katcha road is 1.658 km. (Mine site to NH).
Dumpers capacity	20 MT
Details of existing/proposed crusher	--
Mineral Beneficiation	--
Topsoil	PP reported that there will be generation of topsoil 5,066 cu.m and the topsoil will be used for development of plantation.
Waste	PP reported that during the plan period, waste is likely to be generated in the form of associated clay with the bauxite horizon as mineral wastes, which is below the threshold grade and has no sale value in present market but it may have market in future and therefore, the reject will be stacked separately at statutory barrier.

vii. Water requirement:

Total water requirement	9.0 KLD	Drinking & Domestic	1.0 KLD
		Plantation	3.5 KLD
		Dust suppression	4.5 KLD
Source	PP submitted that the required water will be purchased through private tankers.		

viii. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance & Direction
Nearest Village	Virpur	1.324 km
	Mewasa	3.211 km
Nearest Town	DevbhumiDwarka	18 km
Nearest Highway	National Highway 947	9.512 km, S
	State Highway 29	12.347 km, SE
Nearest Railway station	Bhopalka Railway Station	17.440 km, SE
Water bodies	Rani Nadi	1.132 km

	TharuharTalab	1.362 km
Forest	--	--

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/ No	Details of Certificate/letter/Remarks
Forest Land	No	-
Wildlife Sanctuary	Yes	<p>Marine Sanctuary, Gulf of Kutch - 1.267 km, W Marine National Park, Gulf of Kutch – 6.233 km, NW</p> <p>Final ESZ Notification on Marine National and Marine Sanctuary declared by the Ministry vide Notification S.O 2561(E) dated 22.08.2013</p> <ol style="list-style-type: none"> 1) The Eco-Sensitive Zone (hereinafter referred to as the ESZ) towards landward side constitutes an area of about 208.58 square kilometre including 36 villages adjoining Marine National Park and Sanctuary and the boundary of the ESZ from coastal boundary towards landward, side extends up to a length of one kilometre which include either whole or part of survey numbers upto this limit of one kilometre. 2) The ESZ towards seaward side constitutes an area of 105.14 square kilometre and an area within 200 metre from boundary of Marine National Park and Sanctuary towards seaward side has been included in the said Zone. 3) 31 rivers which flow into the Gulf of Kachchh have been included in the ESZ and the length of the rivers falling in the said Zone varies from 0 to 5 square kilometre and a width of 250 metre from the centre of the river on both sides of river has also been included in the said zone which constitute a total area of 12.53 square kilometre.
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes	Ecologically sensitive zone - 0.278 km
Coastal Regulation Zone (CRZ)	No	High Tide Line: 0.795 km Low Tide Line: 2.557 km CRZ boundary (GCZMA approved Map): 1.001 km, SW
Schedule-I species (No.s and name of)	Yes	Number and name of schedule-1 species will be ascertained through authenticated list from forest

schedule-I species with authenticated letter)		department and will be submitted at the stage of EC Application.
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x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	2.88 Ha ; 500 saplings
Budget for green plant & plantation till the end of life of mine.	1,10,000
Budget for nursery	--
Details of existing plantation and its survival rate	--
No. of tree cuts in the mine lease area and compensatory afforestation	--

xi. Rehabilitation & Resettlement (R&R):

R & R details	Project Proponent submitted that R&R does not involved in this proposal.
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xii. Court case details:

Court Case	Project Proponent submitted an undertaking vide letter dated 20.02.2023 stating that there is no pending Court Cases related to this respective project.
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xiii. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Rs 3.0 Cr
Employment	13 persons

3. Observation and Recommendation of the Committee:

The Project Proponent presented the KML file to indicate the site features in the study area of 10km radius. The EAC on viewing the KML file noted that the Marine Sanctuary, Gulf of Kutch is located at a distance of 1.267 km, W and the Marine National Park, Gulf of Kutch is located at a distance of 6.233 km, NW from the mine lease area. The EAC also noted that the Project Proponent has informed that Eco-Sensitive Zone(ESZ) is located at a distance of 0.278 km from the mine lease area.

The EAC reiterated the order of the Hon'ble Supreme Court of India in IA No 1000 of 2003 in W.P (C) No. 202 of 1995 titled T.N. Godavarman Thirumulpad vs Union of India & Ors order dated 3rd June 2022 wherein it has mentioned that *“Each protected forest, that is national park or wildlife sanctuary must have an ESZ of minimum one kilometre measured from the demarcated boundary of such protected forest in which the activities proscribed and prescribed in the Guidelines of 9th February 2011 shall be strictly adhered to”*. The EAC observed that the Final ESZ Notification on Marine National and Marine Sanctuary was declared by the Ministry vide Notification S.O 2561(E) dated 22.08.2013. The EAC also observed

that the Project Proponent has not submitted any authenticated document/map from the Forest Department regarding the distance of the Eco-Sensitive Zone(ESZ) from the mine lease area. Due to close proximity of Eco-Sensitive Zone(ESZ), the EAC opined that the Ministry may meek comments from the ESZ Division of the Ministry in this regard. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Ministry may seek comments from the ESZ Division of the Ministry regarding the distance of the Eco-Sensitive Zone(ESZ) from the mine lease area and also to clarify whether the instant mine falling within ESZ or not.
- ii. The PP also needs to submit the letter from State forest department regarding the distance of ESZ from mine lease area with authenticated map.
- iii. The Project Proponent needs to plan for backfilling and rehabilitation of mined out areas.

1.3 Extension of validity of Environmental clearance dated 05.08.2021 of M/s Tirupati Roadways for mining of River Bed Materials (Boulder, Gravel & Sand Minor Minerals) beyond 31.03.2022 from Rattewali Block/ PKL B 10 Project for production capacity of 8.39 LTPA from an effective mineable area of 24.25 ha.[B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha)] in the mine lease area of 45.0 Ha, located at Rattewali Village, Tehsil- Barwala, District Panchkula, Haryana – [File No: J-11015/75/2017-IA-II(M), Proposal No: IA/HR/MIN/264651/2022, Consultant: Eco Paryavaran Laboratories & Consultants Pvt. Ltd] - Extension of validity of Environmental clearance

The proposal of M/s Tirupati Roadways is for extension of validity of Environmental clearance dated 05.08.2021 for mining of River Bed Materials (Boulder, Gravel & Sand Minor Minerals) beyond 31.03.2022 from Rattewali Block/ PKL B 10 Project for production capacity of 8.39 LTPA from an effective mineable area of 24.25 ha. [B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha)] in the mine lease area of 45.0 Ha, located at Rattewali Village, Tehsil- Barwala, District Panchkula, Haryana.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 30°38'33" N to 30°39'24.6" N and Longitude: 76°59'17.50" E to 76°50'00" E. The mine lease area falls under the Survey of India Toposheet No H43K14 & H43L2 and the proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The Khol. Hai Raitan Wildlife Sanctuary lies at the distance of 1.98 Km in N direction from the mine lease area.

- ii. The proposal was initially considered in the 49thEAC Meeting (Non-Coal Mining) held during 19th - 21stApril, 2022 wherein the Committee deferred the proposal and was of the view that the proposal may be considered only after submission of the requisite information. The Project Proponent submitted the information on 12.07.2022 and 15.10.2022 in Parivesh portal and accordingly the proposal was reconsidered in the 6thEAC (Non-Coal Mining) meeting held during 9th - 11th November, 2022 as per Ministry's OM dated 27.09.2022 wherein it is mentioned that *"the proposals which have been considered/ appraised once by EAC either for TOR or EC, but final decision has not been taken, shall continue to be appraised at the Central level only, till final disposal for ToR/EC, even after the amendments in the EIA Notification are issued from to time regarding delegation of projects to SEIAAs"*. After detailed deliberations the EAC observed that the certified compliance report is not satisfactory and hence asked the Project Proponent to approach the IRO for the examination of the action taken report for the non-compliances identified by the IRO. The Project Proponent did not email the certified compliance report and the action taken report as agreed before the EAC. Therefore, the EAC deferred the proposal for want of additional information. Then, the Project Proponent submitted the information on 31.01.2023 in Parivesh and accordingly the proposal was reconsidered in the 11th EAC (Non-Coal Mining) held during 1-2 March, 2023.

Based on observation of EAC, compliance of observation of EAC in its meeting held during 9th - 11th November, 2022 made by Project Proponent are detailed below:

S. No	Observation of EAC	Reply by Project Proponent
1	The Project Proponent needs to submit the Certified Compliance Report (CCR) issued by the Integrated Regional Office (IRO) for the earlier EC dated 21.02.2020 and 05.08.2021 and the action taken report submitted by the Project Proponent for the non-compliances identified by the IRO. The PP shall approach the IRO for the examination of the action taken report by the IRO and shall submit the closure report.	<p>The Project Proponent has submitted the copy of the Certified Compliance Report (CCR) issued by the Integrated Regional Office (IRO), Chandigarh for the earlier EC dated 21.02.2020 and 05.08.2021.</p> <p>IRO, Chandigarh vide email dated 13.06.2022 requested to submit the Action Taken Report (ATR) in response to the observations raised during the site visit on 17.05.2022 within two weeks from the date of issue of this letter failing which the monitoring report will be submitted to the competent authority for further necessary action.</p> <p>PP has submitted the ATR vide email</p>

		<p>dated 17.11.2022 in the response of observation raised during site visit on 17.05.2022. The IRO have reviewed the ATR and observed the following for further necessary action: -</p> <ul style="list-style-type: none"> i. PP has not submitted the production records for the year 2020-21 in their ATR submitted on 17.11.2022. ii. PP has submitted that they have installed the piezometer at project site. However, not specified the how many numbers has been installed. iii. PP has not provided the environment audit report of the project. iv. PP has submitted that they have constructed the 06 nos of RWH pits around the project site and may be verified during next visit. <p>In reference to the above, PP has submitted their response to the IRO, Chandigarh vide email dated 02.01.2023.</p>
2	<p>The Project Proponent needs to submit the details of the plantation carried out such as no. of saplings planted, type of species planted, spacing and their survival rate along with the photographs.</p>	<p>The Project Proponent has submitted the Geotagged photographs of plantation and their maintenance.</p>

iii. The Project Proponent initially obtained Environmental Clearance vide F. No J-11015/75/2017-IA-II(M) dated 21.02.2020 wherein it was specifically mentioned that the

- i. *Permissible Mining of River Bed Material (Boulder, Gravel and Sand) shall be limited to 8.39 LTPA instead of requested 19 LTPA, from an effective mineable area of 24.25 ha [B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha)], with a maximum minable depth of 1.33 meter from the original ground level as reported in the replenishment study. The permissible minable material of 8.39 Lakh Ton will be valid till one year from the day of issuance of consent to Operate by HSPCB.*

- ii. For subsequent period, PP shall submit fresh annual replenishment study to MoEF&CC for amendment in EC for mineable quantity and maximum permission depth for mining based on the scientific findings of replenishment study. Such study shall be placed before EAC for appraisal for next three years to assess rate of deposition and accordingly, minable production capacity and depth can be prescribed based on trends analysis, provided it is found scientifically satisfactory by the EAC. The placing of the study report before EAC is mandatory for initial three years.*
- iv. Then, the Project Proponent obtained amendment in EC vide Lr No: J-11015/75/2017-IA-II(M) dated 05.08.2021 that the Permissible Mining of River Bed Material (Boulder, Gravel and Sand) for the FY 2021-22 shall be limited to 8.39 LTPA from an effective mineable area of 24.25 ha [B-1 (11.33 ha), B-2 (4.5 ha) & B-3 (8.3 ha)], with a maximum minable depth of 1.33 m from the original ground level as reported in the replenishment study.
- v. Now, the Project Proponent requested for extension of validity of environmental clearance for mining beyond 31.03.2022 for mining of 8.39 LTPA with an effective mineable area of 24.25 ha without any increase in depth of excavation as per EC letter dated 21.02.2020 and 05.08.2021.
- vi. The Project Proponent submitted that the Letter of Intent (LOI) over an area of 45.0 ha of Mining lease has been granted by the Director General, Department of Mines & Geology, Haryana vide memo no.- DMG/ HY/ ContfRattewali Block/ PKL B 10/ 2017/ 2658 dated 16.06.2017 for a period of 7 years.
- vii. The Project Proponent submitted that the methodology used for replenishment study 2021 is same that of Replenishment Study 2019 & 2020 (Cross-sectional survey by using total Station and UAV) on the basis of which EC was granted. Pre-Monsoon Survey was carried out during June 2021 and Post Monsoon Survey was done during September 2021. For the replenishment study, Firstly, the pre-monsoon data was collected using a total station, and then post-monsoon data collection with a multicomputer UAV/Drone. PP submitted that the lease area is demarcated by its lease pillar and various Ground Control Points (GCP) at site. The 72 no.s of cross-sections were prepared at every 25m interval along the north for both pre-monsoon survey and post-monsoon survey. The sections are then superimposed with each other to study the deposition and erosion by in flow of river stream during the monsoon. The rate of mineral deposition assessed 9,56,868 T in the mineable area. The average thickness of replenishment in the mineable area is around 1.62 m. The Project Proponent has submitted the table showing the sum of the replenishment study showing the average replenished thickness and total replenished volume in the safe workable area (24.2475 Ha).

Study Period	Avg. Replenishment Thickness (m)	Total Replenished Volume (cub. m.)	Total Replenished Tonnes (T)*	Remarks
Pre-Monsoon (June' 2018) & Post-Monsoon (January' 2019)	1.35	3,26,662	8,49,323	The permissible mineable limit of RBM material was restricted to 8.39 LTPA with maximum mineable depth of 1.33m (As per E.C. dt. 21.02.2020).
Pre-Monsoon (June'2020) & Post-Monsoon (September'2020)	1.91	463,721	1,205,673	The permissible mineable limit of RBM material was restricted to 8.39 LTPA with maximum mineable depth of 1.33m (As per Extension of EC dated 05.08.2021).
Pre-Monsoon (June'2021) & Post-Monsoon (September'2021)	1.62	3,68,026	9,56,868	The Project Proponent has applied for mining of 8.39 LTPA of RBM without any increase in depth of excavation within an effective mineable area of 24.25 ha with permitted

				depth of 1.33m.
*Note: Considering Sp. Gr. as 2.6 MT/m ³				

- viii. The Project Proponent submitted that the predominant winds are mainly flowing from North West. Calm conditions are observed for 2.4 % of the total time. PP reported that the ambient air quality monitoring reveals that the maximum concentrations of gaseous pollutants SO₂ and NO₂ have never surpassed the prescribed CPCB limits of 80 mg/m³ for residential and rural areas. The noise level monitored on 22.08.2022 and the monitored noise levels varied from 57.4 dB(A) - 61.4 dB(A) during the day time and 48.4 dB(A) - 50.3 dB(A) during night time in the study area and the noise levels are well within the prescribed limits. PP submitted that the bore well water sample was collected on 22.08.2022 and submitted that the parameters are well within the prescribed limits of IS 10500:2012. Mining will not have any impact on surface and ground water. The present road network is adequate to handle the load of this project. PP also submitted that no major adverse effect on environment is envisaged. The mine management will strengthen the existing control measures and monitor the efficacy of the control measures implemented within the mining area.
- ix. The permission certificate for Groundwater abstraction has been obtained from the Haryana Water Resources Authority, Govt. of Haryana vide NOC No: HWRA/NOC/IND/N/2022/439 dated 01.07.2022 for abstraction of fresh water of 10.0 m³/day and is valid upto 01.07.2023. The Project Proponent submitted the Consent to Operate issued by the Haryana State Pollution Control Board vide order No. HSPCB/Consent/: 313100420PANCTO7536558, dated 20.03.2020 for production of Boulder, Sand and Gravel minor mineral for the capacity of 2299 Metric Tonnes/day for the period 20.03.2020 to 30.09.2022.
- x. The Project Proponent submitted the past production details duly authenticated by the Mining Officer, Mines & Geology Dept., Panchkula vide Lr Memo No: - Mining/PKL/287 dated 04.05.2022 for the period 2019-2020 to 2021-22.

S. No	Year	Production in (MT)	EC Capacity (LTPA)
1	2019-20	98	8.39
2	2020-21	6,76,618	8.39
3	2021-22	8,31,960	8.39

- xi. The Project Proponent vide email and letter dated 01.03.2023 submitted an undertaking stating that there is no court case or litigation pending against this project in any court of Law.

3. Observation and Recommendation of the Committee:

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The EAC observed that the Integrated Regional Office (IRO), Chandigarh has noted four non-compliances regarding production records, installation of piezometer at site, environment audit report and verification of RWH pits. The EAC noted that the Project Proponent has submitted their response for the four non-compliances to the IRO vide email dated 02.01.2023. The EAC also noted that the examination of the action taken report is yet to be issued by the IRO after verifying the non-compliances at site. The EAC asked about the status of the Mining Plan. The Project Proponent informed the EAC that the Mining Plan for the period 2023-24 is yet to be approved by the Department of Geology and Mining. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the closure report for the non-compliances to be issued by the Integrated Regional Office (IRO), Chandigarh.
- ii. The Project Proponent needs to submit the approved Mining Plan for next plan period i.e from 2023-24 onwards.

1.4 Bagiaburu Iron Ore mine of M/s The Orissa Minerals Development Company Limited for increase in Iron Ore production to 0.36 MTPA (ROM), OB/SB/IB: 0.11 MTPA (Total Excavation: 0.47 MTPA) in the mine lease area of 21.52 ha, located at Village Uliburu, Tehsil Barbil, District Keonjhar, Odisha - [F.No:23-205/2018-IA.III(V), Proposal No: IA/OR/MIN/288942/ 2017 dated 17.08.2022, Consultant: Wolkem India Limited] - Environmental Clearance (Violation)

The instant proposal is for mining of Iron Ore in Bagiaburu Iron Ore mine of M/s The Orissa Minerals Development Company Limited for increase in Iron Ore production to 0.36 MTPA (ROM), OB/SB/IB: 0.11 MTPA (Total Excavation: 0.47 MTPA) in the mine lease area of 21.52 ha, located at Village Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 22°07'52.417"N to 22°08'20.973"N and Longitude: 85°23'02.099"E to 85°23'26.266" E. The mine lease area falls under the Survey of India Toposheet No: 73F/8 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals and attracts the general conditions as the interstate boundary of Jharkhand-Odisha located at a distance of 1.70 km, N from the mine lease area and falls under Category "A" and appraised at the Central level.
- iii. As decided by the Competent Authority, considering tenure of EAC (Violation) till June 2021, it has been decided that, henceforth all the EC applications for which ToR was recommended by the EAC (Violation) shall be appraised by the sectoral EACs. The respective sectors may consider co-opting two-three members from EAC (Violation) to facilitate appraisal of proposals related to violations.
- iv. The proposal was earlier considered in the 3rd EAC (Non-Coal Mining) meeting held on 5th September, 2022 wherein the EAC after detailed deliberations deferred the proposal. Then, the Project Proponent submitted the information on 06.02.2023 in Parivesh portal and accordingly the proposal was reconsidered in the 11th EAC (Non-Coal Mining) held during 1-2 March, 2023.

Based on observation of EAC, compliance of observations of EAC in its meeting held on 5th September, 2022 made by Project Proponent are detailed below:

S · N o	Observation of EAC	Reply by Project Proponent
1	<p>The Project Proponent needs to revisit the damage assessment to the following attributes as mentioned below: -</p> <p>a) Air Environment: PP needs to use either USEPA/AERM OD or CMPDI emission figures to assess the</p>	<p>The Project Proponent has submitted the revised damage assessment to the following attributes as mentioned below:-</p> <p>The Project Proponent has submitted that the calculation of the environmental prices of air emissions i.e. PM₁₀, PM_{2.5}, NO_x and SO₂ as part of direct or indirect damages caused due to production without valid EC, in-line with the following methods:</p> <p>i. Mechanism developed by CPCB for assessment of damage to the air quality, public health and agriculture production loss dated 19.02.2020"</p>

damage based on the emission rates in kg (EU 28 HANDBOOK/ EEA) on annualised basis and total damage value shall be arrived.

ii. “Environmental Prices Handbook EU28 version” Methods and numbers for valuation of environmental impacts, Bruym, S.T. et. al, 2018, Delft, CE Delft.

Ambient Air Quality (AAQ) Index at Peak Violation Production							Remark Possible Health	Impacts
AAQ Station Locations	Air Quality Index (AQI) at Peak Violation Production			National AQI Range				
	PM ₁₀	PM _{2.5}	NO ₂	PM ₁₀	PM _{2.5}	NO ₂		
Mine site	68.26	42.71	17.70	51-100	31-60	0-40	Satisfactory	Minor breathing discomfort to sensitive people
Belkundi	66.70	44.20	18.56	51-100	31-60	0-40		
Karakhendra	69.14	51.01	17.99	51-100	31-60	0-40		
Barajamda	71.73	51.41	22.89	51-100	31-60	0-40		
Bagiaburu	69.66	53.23	17.99	51-100	31-60	0-40		
Barbil	69.84	42.55	19.22	51-100	31-60	0-40		
Thakurani	77.00	46.91	19.67	51-100	31-60	0-40		

Environmental Price of average atmospheric emission (€/kg Emissions)

Pollutants	Environmental Price of Avg. Atmospheric Emission (€/kg Emissions, 2015)		
	Lower	Central	Upper
PM ₁₀	19	26.6	41
PM _{2.5}	27.7	38.7	59.5
NOx	9.97	14.8	22.1
SO ₂	8.3	11.5	17.9

Source: Methods and numbers for valuation of environmental impacts, Bruym, S.T. et al, 2018, Delft, CE Delft

Environmental Price of Avg. atmospheric emission (Rs/kg Emissions)

Pollutants	Environmental Price of avg. Atmospheric emission (€/kg Emissions, 2015)	Exchange Rate (2015)	Inflation Factor (2015 to 2019)	Environmental Price (Rs. /kg Emissions)
PM ₁₀	26.6	64.89	1.19	2519.34
PM _{2.5}	38.7	64.89	1.19	2665.36
NOx	14.8	64.89	1.19	1401.74
SO ₂	11.5	64.89	1.19	1089.19

Source: Environmental prices Handbook EU28 version” Methods and numbers for valuation of environmental impacts, Bruym, S.T. et al,2018, Delft, CE Delft, Page No. 5.

Emission Factors & Control Factor considered for calculating pollution load

S. No.	Activity	Unit	PM _{2.5}	PM ₁₀	TSP	Control Factor	PM _{2.5}	PM ₁₀	TSP
1	Topsoil removal	kg/t	0.00058	0.0052	0.029	50% control when soil	0.00029	0.0026	0.010

							is wet			1 4 5		
2	Drilling in Ore Bench	kg/hole	0.04	0.22	0.83	70% for water sprays	0.028	0.154	0	. 5 8 1		
3	OB Loading	kg/t	0.000015	0.00014	0.00077	None	0.000015	0.000014	0	. 0 0 7 7		
4	OB Unloading	kg/t	0.00006	0.00005	0.00071	None	0.00006	0.00005	0	. 0 0 7 1		
5	Ore Loading	kg/t	0.00021	0.00015	0.00071	None	0.00021	0.00015	0	. 0 0 7 1		
6	Ore Unloading	kg/t	0.00014	0.000123	0.00071	None	0.00014	0.000123	0	. 0 0 7 1		
7	Ore/ OB transportation on unpaved haul road	kg/VKT	0.076	0.53	0.056	None	0.076	0.53	0	. 0 5 6		
8	Ore road transportation	g/second	0.1	0.5			0.1	0.5				
9	Ore sizing/ Crushing (Primary Crushing)	kg/t	0.008	0.056	0.28	99% for enclosure with dust extraction system	0.00792	0.05544	0	. 2 7 7 2		
10	Blasting OB/ Ore	kg/blast	0.03	0.18			0.03	0.18				
Source: Determination of the emission rate from various opencast mining operations" dated 24/11/2001 and AP 42, USEPA (1998).												
Year wise Damage Cost due to production under violation												
S. No.	Year Under Violation	Production under Violation (Tons)	PM ₁₀ Load (Kg/Day)	PM _{2.5} Load (Kg/Day)	NOx Load (Kg/Day)	SO ₂ Load (Kg/Day)	Operational Days under Violation	PM ₁₀ Load Cost (Rs./Yr.)	PM _{2.5} Load Cost (Rs./Yr.)	NOx Load Cost (Rs./Yr.)	SO ₂ Load Cost (Rs./Yr.)	Total Amount in FY (Rs.)

		1	1993-94	0	0	0	0	0	0	0	0	0	0	0
		2	1994-95	30	0.01	0.01	0.01	0.01	3	25	37	14	11	87
		3	1995-96	0	0	0	0	0	0	0	0	0	0	0
		4	1996-97	0	0	0	0	0	0	0	0	0	0	0
		5	1997-98	0	0	0	0	0	0	0	0	0	0	0
		6	1998-99	0	0	0	0	0	0	0	0	0	0	0
		7	1999-00	0	0	0	0	0	0	0	0	0	0	0
		8	2000-01	2000	0.01	0.01	0.01	0.01	10	252	367	140	109	868
		9	2001-02	4395	0.02	0.01	0.01	0.01	21	1,058	770	294	229	2,351
		10	2002-03	45571	2.08	0.34	0.6	0.01	175	9,17,040	2,18,089	1,47,183	1,906	12,84,217
		11	2003-04	5500	0.05	0.03	0.01	0.01	28	3,527	3,079	392	305	7,303
		12	2004-05	65500	3.55	0.76	0.08	0.01	195	17,44,013	5,43,206	21,867	2,124	23,11,211
		13	2005-06	5000	0.18	0.03	0.02	0.01	25	11,337	2,749	701	272	15,059
		14	2006-07	17835	1.16	0.13	0.02	0.01	90	2,63,019	42,885	2,523	980	3,09,407
		15	2007-08	28450	1.72	0.72	0.03	0.01	95	4,11,660	2,50,711	3,995	1,035	6,67,400
		16	2008-09	5000	2.08	0.51	0.03	0.01	25	1,31,006	46,733	1,051	272	1,79,063
		17	2009-10	67100	4.34	1.42	0.4	0.01	205	22,41,457	10,66,986	1,14,943	2,233	34,25,619
		18	2010-11	6350	1.88	0.89	0.23	0.01	32	1,51,563	1,04,389	449	349	2,56,750
														84,59,335

b) Water Environment: PP needs to refer Ministry of Jal Shakti, (Central Ground Water Authority) Notification S.O 3289 (E) dated 24th September, 2020 for computing the damage occurred during operation period

The Project Proponent has submitted that the revised damage assessment of water resources has been done referring to Ministry of Jal Shakti, (Central Ground Water Authority) Notification S.O 3289 (E) dated 24th September' 2020 for computing the damage occurred during operation period from the year 1993-94 to 2010-11. Non provision of surface water structures including toe wall/garland drains for dumps and quarry and their total cost saved has been calculated as Rs.4.3 lakhs approx. PP has submitted that they have built embankment on Dalki Nala to arrest silt, developed Drinking water supply system, community pond, and development of dug wells around the Mining lease area.

<p>from the year 1993-94 to 2010-11 and Non provision of surface water structures including toe drains/ garland drains and toe walls for the dumps and as well around the quarry and their total cost saved shall also be brought out.</p>	
<p>c) Ecology and biodiversity: Non-compliance of plantation for the past period and 10% of cost saved due to noncompliance of Wildlife Conservation plan budget for past period shall also be added.</p>	<p>The Project Proponent has submitted that about 10% of the financial amount has been demarcated for violation period on account of no measures taken for conservation of wildlife during violation (1993-94 to 2010), for damage/ remediation, as given below:</p> <ul style="list-style-type: none"> i. Amount for Site Specific Wild Life Conservation Plan (SSWCP) for 10 years (2011-2021) = Rs. 52 Lakhs ii. Amount for SSWCP for 1 year = Rs. 5.2 Lakhs iii. 10% of SSWCP for 1 year = Rs. 0.52 Lakhs iv. Damage cost for the violation period (16 years) = Rs. 0.52 Lakhs x 16 years = Rs. 8.32 Lakhs.
<p>d) Damage due to Noise and vibration if exceeded the norms</p>	<p>The Project Proponent has submitted that when compared with the Noise pollution (Regulation & Control) Rules, 2000, noise levels indicated well within the norms as prescribed by WHO for 'Residential area' for all of the monitoring locations during the violation period with maximum excess production. Thus, there is no significant damage due to mining activities carried out in noise environment.</p> <p>PP also submitted that as no permanent structure exists within 300m from working faces of the mine, there is no significant damage from vibration. Therefore, this impact has been considered as low to moderate. Mitigation measures to be adopted as per remediation plan to compensate the violation.</p>

<p>e) Economic benefit accrued due to the production of 2.53 lac tons under violation and cost saved in EMP expenditure during this period @ 3% of the total shall also be included.</p>	<p>The Project Proponent has submitted the Economic benefit derived due to excess production as given below: -</p> <ol style="list-style-type: none"> i. PP has produced 2.53 lac tons of Iron ore under violation. The total economic benefit (profit after tax) is approx. Rs.13.83 crore which is accrued due to Iron ore production without EC. ii. Therefore, 3% of the profit accrued during violation period = Rs. 41, 49,786. iii. Capital cost proposed for Environmental Management Plan (EMP) expenditure is Rs. 35.00 Lac. Therefore, 3% of saving in EMP expenditure cost during violation period is Rs. 1,05,000/-. iv. Hence, a total of Rs. 42,54,786/- is assigned towards the same. 																																																																						
<p>f) The damages so arrived at shall be covered under Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan and shall be budgeted for 3 years and the expenditure shall be specific and monitorable.</p>	<p>The Project Proponent has submitted the summary of the damage cost as mentioned below:-</p> <table border="1" data-bbox="518 985 1401 1489"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Damage Cost (Rs. in Lakh)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Land Environment</td> <td>Nil</td> </tr> <tr> <td>2</td> <td>Air Environment</td> <td>84.59</td> </tr> <tr> <td>3</td> <td>Water Environment</td> <td>4.38</td> </tr> <tr> <td>4</td> <td>Surface water structure</td> <td>4.30</td> </tr> <tr> <td>5</td> <td>Noise Environment</td> <td>Nil</td> </tr> <tr> <td>6</td> <td>Biological Environment</td> <td>8.32</td> </tr> <tr> <td>7</td> <td>Socio-Economic Environment</td> <td>Nil</td> </tr> <tr> <td>8</td> <td>3% of the profit accrued during violation period</td> <td>41.50</td> </tr> <tr> <td>9</td> <td>3% of saving in EMP cost during violation</td> <td>1.05</td> </tr> <tr> <td></td> <td>Total</td> <td>144.14</td> </tr> </tbody> </table> <p>Remediation Plan:</p> <table border="1" data-bbox="518 1556 1401 2036"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Particulars</th> <th colspan="3">Remediation Budget (INR)</th> <th rowspan="2">Remediation budget</th> </tr> <tr> <th>1st year</th> <th>2nd year</th> <th>3rd year</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Land Environment (Water sprinkling)</td> <td>9,00,000</td> <td>9,00,000</td> <td>9,00,000</td> <td>Rs 27,00,000</td> </tr> <tr> <td rowspan="2">2</td> <td>Air Environment (Air Monitoring)</td> <td>40,000</td> <td>30,000</td> <td>30,000</td> <td>Rs 1,00,000</td> </tr> <tr> <td>Plantation</td> <td>1,50,000</td> <td>1,50,000</td> <td>1,50,000</td> <td>Rs 4,50,000</td> </tr> <tr> <td rowspan="2">3</td> <td>Water Environment (Rainwater Harvesting (2) at sites)</td> <td>2,00,000</td> <td>2,00,000</td> <td>2,00,000</td> <td>Rs 6,00,000</td> </tr> <tr> <td>Construction of septic tank & soak pit</td> <td>4,00,000</td> <td>3,00,000</td> <td>3,00,000</td> <td>10,00,000</td> </tr> </tbody> </table>	S. No.	Particulars	Damage Cost (Rs. in Lakh)	1	Land Environment	Nil	2	Air Environment	84.59	3	Water Environment	4.38	4	Surface water structure	4.30	5	Noise Environment	Nil	6	Biological Environment	8.32	7	Socio-Economic Environment	Nil	8	3% of the profit accrued during violation period	41.50	9	3% of saving in EMP cost during violation	1.05		Total	144.14	S. No	Particulars	Remediation Budget (INR)			Remediation budget	1 st year	2 nd year	3 rd year	1	Land Environment (Water sprinkling)	9,00,000	9,00,000	9,00,000	Rs 27,00,000	2	Air Environment (Air Monitoring)	40,000	30,000	30,000	Rs 1,00,000	Plantation	1,50,000	1,50,000	1,50,000	Rs 4,50,000	3	Water Environment (Rainwater Harvesting (2) at sites)	2,00,000	2,00,000	2,00,000	Rs 6,00,000	Construction of septic tank & soak pit	4,00,000	3,00,000	3,00,000	10,00,000
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4	Noise Environment (Noise monitoring & earbuds/ earplugs for workers safety)	50,000	50,000	50,000	1,50,000
5	Biological Environment (Flora - Plantation (1.0 lakh already done and balance 7.5 lakhs to be done) and green belt development in inside premises	2,50,000	2,50,000	2,50,000	8,50,000
	Fauna - Conservation of schedule-I species in the study area)	4,00,000	3,50,000	3,00,000	10,50,000
6	Socio-economic Environment (Solar Lights etc.)	2,00,000	2,00,000	2,00,000	Rs 6,00,000
Total					Rs 75,00,000

Natural Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	Avenue Plantation (200 m) - 30 plants on each side of the road	2,00,000	2,00,000	2,00,000	6,00,000
2	Maintenance of Avenue Plantation	50,000	50,000	50,000	1,50,000
3	Installation of Rainwater harvesting at 3 nearby Govt. Schools of Keonjhar District	5,00,000	5,00,000	5,00,000	15,00,000
4	Recharge pond (40 x 30 feet = 1,00,000 each)	6,00,000	6,00,000	6,00,000	18,00,000
Total					Rs 40,50,000

Community Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	RO with water cooler at 5 Govt. Schools	1,50,000	1,50,000	1,50,000	4,50,000
2	6 Computer in 5 Govt. School each year	3,00,000	3,00,000	3,00,000	9,00,000
3	Plantation at public parks in nearby areas	1,50,000	1,50,000	1,50,000	4,50,000
4	Goat farming promotion and financial assistance to locals	2,00,000	2,00,000	2,00,000	6,00,000
5	Poultry farming promotion and financial assistance to locals	3,00,000	3,00,000	1,75,905	7,75,905

		6	Mushroom farming	2,00,000	2,00,000	2,00,000	6,00,000															
		7	Sewing machine distribution to local female for financial stability & income generation	4,00,000	4,00,000	4,00,000	12,00,000															
				Total			Rs 49,75,905															
		<p>Summary of Remediation Plan, Natural and Community Resource Augmentation Plan</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Particulars</th> <th>Proposed Budget (INR)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Remediation Plan</td> <td>Rs 75,00,000</td> </tr> <tr> <td>2</td> <td>Natural Resource Augmentation Plan</td> <td>Rs 40,50,000</td> </tr> <tr> <td>3</td> <td>Community Resource Augmentation Plan</td> <td>Rs 49,75,905</td> </tr> <tr> <td></td> <td>Total</td> <td>Rs 1,65,25,905</td> </tr> </tbody> </table>						S. No	Particulars	Proposed Budget (INR)	1	Remediation Plan	Rs 75,00,000	2	Natural Resource Augmentation Plan	Rs 40,50,000	3	Community Resource Augmentation Plan	Rs 49,75,905		Total	Rs 1,65,25,905
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2	The Project Proponent needs to revise the Land Use/Land Cover classification of the mine lease area and surface features like roads, nallah/ streams, existed in the area should be shown on historical imagery during the pre-mining operation and the current status.	The Project Proponent has submitted the historical imagery during the pre-mining operation during the year 2010 and the status during the year 2020 showing the existing plantation, waste dump and mine road.																				
3	The Project Proponent needs to revise the air quality modeling and shall carry out the cumulative	<p>The Project Proponent has submitted that the air quality modeling has been carried out using AERMOD View Version 9.9.5 software considering the impact of mining activity including movement of vehicles for transportation of mineral. PP also submitted the incremental GLC's with EMP measures and without EMP measures as given below: -</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Max. Incremental GLC's in µg/m³</th> <th>Direction</th> <th>Distance</th> </tr> </thead> <tbody> </tbody> </table>						Pollutant	Max. Incremental GLC's in µg/m ³	Direction	Distance											
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impact assessment by considering all the mining activity including the transport scenario of the mines, crusher and Shri Jagannath Steel & Power Ltd. found adjacent to the mine lease area. The Project Proponent shall consider the peak production capacity of this mine for the prediction of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be	s	With EMP Measures	Without EMP Measures		(Km)
	Area Source				
	PM ₁₀	4.52	18.08	SE	0.330
	PM _{2.5}	3.30	13.20	NW	0.210
	NO _x	5.03	20.12	NW	0.275
SO ₂	2.77	11.08	NW	0.261	

	submitted.	
4	The Project Proponent needs to submit the measures taken for protection of seasonal nallah flowing within the mine lease area. PP also needs to submit the time bound action plan for developing three tier plantation on both the sides and also by keeping a safe distance of 50m on either side.	<p>The Project Proponent has submitted that no mining activity is proposed in and around the nala. 50m safety zone on each side of seasonal nala will be left. It will be ensured that there shall be no obstacle in water flow due to mining activity.</p> <p>There is no movement proposed from north quarry to south quarry Two weighbridges are proposed for north & south quarry separately. Parapet wall/ safety wall will be constructed. It will also be ensured that no contamination will occur due to mining process in the flowing water of nala as there is 50m Safety zone on both sides of nala. Water monitoring on regular basis will be done to ensure no contamination. Further, PP submitted the map of the nala showing the safety zone.</p>
5	The Project Proponent needs to revise the compliance of the NEERI conditions with time bound action plan.	The Project Proponent has submitted that the compliance of the conditions laid down by CSIR-NEERI has been revised with time bound action plan.
6	The EAC observed that the baseline data was carried out during October to December, 2019 and is almost 3 years old and hence	The Project Proponent has submitted that fresh baseline data for one month has been carried out during October, 2022. The Ambient Air quality monitored at 7 locations, noise level at 7 locations, surface water quality at 2 locations, ground water quality at 5 locations and soil quality at 7 locations.

	the EAC asked the Project Proponent to revalidate with one-month baseline data.																											
7	The EAC opined that the Wildlife Conservation Plan needs to be revisited since it was approved on 05.02.2011 and the Project Proponent also needs to submit the satisfactory compliance of Wildlife Conservation Plan approved on 05.02.2011 from the Forest Department.	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha vide Lr No. 1138/ CWLW-FDWC-FD-0154-2021 Bhubaneswar dated 01.02.2023 for approval of Site Specific Wildlife Conservation Plan at financial outlay of Rs 91.80 Lakhs for a period of 5 years.																										
8	The Project Proponent needs to revise the EMP cost in a more specific manner.	<p>The Project Proponent submitted the EMP cost calculated earlier as given below: Total Project Cost = Rs. 11,00,00,000/- Proposed capital EMP Cost = Rs. 35,00,000/- Proposed Recurring EMP cost=Rs.10,00,000/-</p> <p>As suggested by Hon'ble EAC, the cost of the revised EMP is given as below: -</p> <table border="1"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Particulars</th> <th>Capital Cost</th> <th>Recurring Cost</th> </tr> <tr> <th>Proposed</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)</td> <td>12.50</td> <td>2.00</td> </tr> <tr> <td>2.</td> <td>Pollution Monitoring for Air, Soil, Water&Noise(Total 7 locations including mine)</td> <td>7.00</td> <td>1.50</td> </tr> <tr> <td>3.</td> <td>Occupational Health & Safety</td> <td>3.00</td> <td>1.50</td> </tr> <tr> <td>4.</td> <td>Green Belt Development</td> <td>7.50</td> <td>3.50</td> </tr> <tr> <td>5.</td> <td>Miscellaneous (Fencing, protection, regeneration, and</td> <td>5.00</td> <td>1.50</td> </tr> </tbody> </table>	S. No	Particulars	Capital Cost	Recurring Cost	Proposed	Proposed	1.	Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)	12.50	2.00	2.	Pollution Monitoring for Air, Soil, Water&Noise(Total 7 locations including mine)	7.00	1.50	3.	Occupational Health & Safety	3.00	1.50	4.	Green Belt Development	7.50	3.50	5.	Miscellaneous (Fencing, protection, regeneration, and	5.00	1.50
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			maintenance of safety zone)				
			Sub-Total		35.0	10.00	
		6.	Activities under CER* in light of MoEF&CC's, GOI vide OM dated 30.09.2020 are given below:				
		a.	Organize Medical Camps in nearby villages of Uliburu, Belkundi, Kharakendra, Barajamda with free medicine distribution and medical check-up (Twice a Year)		5.00	2.00	
		b.	Sanitation & Drinking Water supply (supply of drinking water, construction/ installation community toilets for mails & females in Govt. School at Uliburu, Belkundi, Kharakendra, Barajamda Villages (Govt. Primary School, Uliburu).		3.00	1.00	
		c.	Providing the employment to locals and conducting skill development/ health education training/ vocational training programmes for unemployed youth /women of surrounding villages of Belkundi, Kharakendra, Barajamda&Uliburu.		3.00	1.00	
		d.	Scholarship Programme for Meritorious students of Nearby villages of Belkundi, Kharakendra, Barajamda&Uliburu		2.50	0.50	
		e.	Providing infrastructure like construction of additional classrooms, furniture, support to special children education etc. in nearby schools villages of Belkundi, Kharakendra, Barajamda&Uliburu		3.50	1.00	
		f.	Development of Roads (Uliburu village road) and Support for locals in transportation & other related business.		5.00	2.00	
			Sub-Total		22.00	7.50	
			Grant Total		57.00	17.50	
			Note: *Activities proposed under CER will be undertaken in 3 years time only.				
9	The Project Proponent needs to submit the water balance for monsoon and non-monsoon period along with past consumption during operation period from the year 1993-94 to 2010-11.	The Project Proponent has submitted the flow chart of water balance for monsoon and non-monsoon period and PP submitted that the peak fresh water demand for non-monsoon period observed as 50.0 KLD and for monsoon period observed as 10.0 KLD. PP also submitted the water consumption during the operation period from the year 1993-94 to 2010-11 as given below: -					
		S . N o.	Year Under Violation	Production under Violation (Tons)	Working Days	Water used (drinking and mining in KLD)	Cost of surface water consumed for mining activity @ 15 Rs/m ³ [as per CPCB guideline]
		1	1993-94	0	0	0	0
		2	1994-95	30	3	3	45
		3	1995-96	0	0	0	0
		4	1996-97	0	0	0	0
		5	1997-98	0	0	0	0
		6	1998-99	0	0	0	0
		7	1999-00	0	0	0	0
		8	2000-01	2000	10	200	3000
		9	2001-02	4395	21	4395	65925

		1	2002-03	45571	227	4557	68355		
		1	2003-04	5500	28	550	8250		
		1	2004-05	65500	328	6550	98250		
		1	2005-06	5000	25	500	7500		
		1	2006-07	17835	90	1783	26745		
		1	2007-08	28450	143	2845	42675		
		1	2008-09	5000	25	500	7500		
		1	2009-10	67100	336	6710	100650		
		1	2010-11	6350	32	635	9525		
							438420		
		Note: Water consumption taken 1 KLD per 10-ton of production for the production year from 1993-94 to 2010-11							
10	The Project Proponent needs to public hearing action plan with a timeline of 3 years in a verifiable and monitorable manner. The budget for the public grievances shall be a minimum of @ 2% of the capital expenditure and shall be spent in 3 years with specific and monitorable expenditure for the neighbourhood and provided under EMP.	The Project Proponent has submitted that as suggested by Hon'ble EAC, action plan for Public Hearing (PH) has been revised for three years' time period. The budget for the public grievances has been allocated @ 2% of the capital expenditure i.e. Rs. 22.0 Lakhs (2% of Rs. 11.0 Crore). The said amount will be spent within 3 years with specific and monitorable expenditure for the neighborhood and provided under EMP.							
		S N o	Name of the Activity			Year wise Investment (in Lakhs)			Total Cost (In Lakhs)
			I	II	III				
		1	Organize Medical Camps in nearby villages Uliburu, Belkundi, Kharakendra, Barajamda.			2.0	1.5	1.5	5
		2	Sanitation & Drinking Water supply (supply of drinking water, construction/ installation community toilets for males & females in Govt. School at Uliburu, Belkundi, Kharakendra, Barajamda Villages (Govt. Primary School, Uliburu).			2.0	1.5	1.5	5
		3	Conducting skill development/health education training/ vocational training programmes for unemployed youth /women of surrounding villages of Belkundi, Kharakendra, Barajamda&Uliburu.			1.0	0.7 5	0.7 5	2.50
		4	Scholarship Programme for Meritorious students of Nearby Villagesof Belkundi, Kharakendra, Barajamda&Uliburu			1.0	0.7 5	0.7 5	2.50
		5	Providing infrastructure like construction of additional classrooms, furniture, support to special children education etc. in nearby schools villages of Belkundi, Kharakendra, Barajamda & Uliburu			3.0	2.0	2.0	7
		Total Expenditure			9.0	6.5	6.5	22.00	

<p>1 1</p>	<p>The EAC noted that the instant project is located at a distance of 1.70 km, N from the interstate boundary of Jharkhand-Odisha. Hence, the Project Proponent needs to submit the list of public participated in the public hearing from Odisha and Jharkhand.</p>	<p>The Project Proponent has submitted that wide advertisement as per EIA Notification, 2006 was done by SPCB, Govt. of Odisha for carrying out public hearing. The details are as here under:</p> <ol style="list-style-type: none"> i. Advertisement was published in one national daily newspaper i.e., The New Sunday Express and one local daily Odiya newspaper "The Dharitri "on 19th June 2022. ii. Details were displayed on SPCB, Govt. of Odisha website with project information and also displayed at Local Panchayat Offices, Tahasil Office and Municipality office. iii. Two days before the date of public hearing, wide advertisement through vehicle duly fitted with loudspeakers and banners in local language was carried out and this has been done including border areas. PP also submitted the photographs for the same & list of participation in public hearing. iv. Most of the representatives were from State of Odisha in the public hearing. 																																	
<p>1 2</p>	<p>The Project Proponent needs to submit the normative and peak total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled annually and the management of topsoil and waste needs to be properly addressed. The mineable</p>	<p>The Project Proponent has submitted that the total mineable reserve of iron ore is estimated to be 37,92,932 MT whereas total resource is 49, 41, 794 MT. Proposed production in plan period is 18,00,000 MT. Remaining reserve within lease area will be 37,92,932MT – 18,00,000MT = 19,92,932 MT. Considering the production of iron ore @ 3,60,000 MT per annum, Life of the mine will be 19,92,932/3,60,000 = 5.54 years say 6 years. Therefore, the life of the mines is 11 yrs including 5 yrs. of planned period + 6 yrs. of conceptual period. (Note: Life of mines may change depending upon the results of proposed exploration in future).</p> <p>PP also submitted that during conceptual period, 1,40,240 cu.m of waste will be generated. Out of which about 10% i.e. 14,024 cu.m will be utilized for road maintenance. Balance 1,26,216 cu.m will be utilized for back filling of mined out land. Further, PP submitted the total excavation details as given in table below:</p> <table border="1" data-bbox="507 1816 1406 2040"> <thead> <tr> <th rowspan="2">Year</th> <th rowspan="2">Quarry Name</th> <th rowspan="2">Total tentative Excavation (MT)</th> <th rowspan="2">Top-soil (MT)</th> <th rowspan="2">OB/SB/IB (Cumulative) (MT)</th> <th colspan="2">ROM (MT)</th> <th rowspan="2">ROM (MT)</th> </tr> <tr> <th>Ore * (MT)</th> <th>Mineral Reject (MT)</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8=6+7</th> </tr> </thead> <tbody> <tr> <td rowspan="2">2021-22</td> <td>North Quarry</td> <td>152482</td> <td>Nil</td> <td>Nil</td> <td>103965</td> <td>48517</td> <td>152482</td> </tr> <tr> <td>South Quarry</td> <td>227618</td> <td>Nil</td> <td>20100</td> <td>141490</td> <td>66028</td> <td>207518</td> </tr> </tbody> </table>	Year	Quarry Name	Total tentative Excavation (MT)	Top-soil (MT)	OB/SB/IB (Cumulative) (MT)	ROM (MT)		ROM (MT)	Ore * (MT)	Mineral Reject (MT)	1	2	3	4	5	6	7	8=6+7	2021-22	North Quarry	152482	Nil	Nil	103965	48517	152482	South Quarry	227618	Nil	20100	141490	66028	207518
Year	Quarry Name	Total tentative Excavation (MT)						Top-soil (MT)	OB/SB/IB (Cumulative) (MT)		ROM (MT)		ROM (MT)																						
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2021-22	North Quarry	152482	Nil	Nil	103965	48517	152482																												
	South Quarry	227618	Nil	20100	141490	66028	207518																												

reserves, blocked reserves need to be mentioned along with the life of mine. Waste to be generated during the entire life of mine and details of the location of dumping/backfilling area need to be submitted.		Total	380100	Nil	20100	245455	114545	360000
	2022-23	North Quarry	280115	Nil	4800	187715	87600	275315
		South Quarry	95395	Nil	10710	57740	26945	84685
		Total	375510	Nil	15510	245455	114545	360000
	2023-24	North Quarry	224879	Nil	15000	143099	66780	209879
		South Quarry	184291	Nil	34170	102356	47765	150121
		Total	409170	Nil	49170	245455	114545	360000
	2024-25	North Quarry	216258	Nil	10080	140576	65602	206178
		South Quarry	216212	Nil	62390	104879	48943	153822
		Total	432470	Nil	72470	245455	114545	360000
	2025-26	North Quarry	474480	Nil	114480	245455	114545	360000
		Total	474480	Nil	114480	245455	114545	360000
	Grand Total		2071730	Nil	271730	1227275	572725	1800000
1 3	The Project Proponent needs to revise the specific diesel consumption of 785 liters/day to liters/tonnes. PP also needs to submit the action plan for promotion of Solar Energy.	<p>The Project Proponent has submitted that the total specific diesel consumption is 785 litres/ day. On conversion it comes to 0.654 litres/ tonne. Year-wise target for reduction is 2% on annual basis. PP also submitted that electric power driven combined mobile crusher/ screening plant will be installed.</p> <p>Further, PP submitted that the use of Solar energy will be promoted and Solar Photo Voltaic (SPV) installation on Rooftop of various buildings/ sheds will be carried out preferably on shadow free area in such a way that the generation is maximized on each building Rooftop suitable for installation of Solar PV power plants. In first three years, PP will be starting Solar Photo Voltaic (SPV) in mine's office, approach road, streetlight, mineral storage yard, face working and residential quarters etc. From the fourth year onwards, solar energy use for other mining purposes will be explored in consultation with various Govt. Departments.</p>						
1 4	The Project Proponent needs to submit the letter from the Principal Chief Conservator of Forest (PCCF) to confirm	<p>The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha vide Lr No. 1179/CWLW-FDWC-FD-0154-2021 Bhubaneswar dated 02.02.2023 stating that the Karo-Karampada Elephant Corridor passes at a distance of 6.20 kms from the outer boundary of mining lease area. This corridor which has been identified in the past will be notified once the matter of elephant corridors is decided upon by the Hon'ble High Court of Orissa which is already in session of such matter in WP (PIL) No. 14706/2022. However, pending</p>						

	<p>whether there is any presence of Elephant corridor in the study area or not?</p>	<p>decision of the Hon'ble High Court, the measures to address the elephant issues are already incorporated in the revised SSWLCP approved by letter no 1138 dated 01.02.2023.</p>																																																														
<p>1 5</p>	<p>The EAC noted that the Project Proponent has allocated the budget under Corporate Environmental Responsibility which is not acceptable. Hence, the Project Proponent needs to revise the budget as per Ministry's OM dated 30.09.2020.</p>	<p>The Project Proponent has submitted that the in light of MoEF&CC OM dated 30.09.2020, the CER has become part of Environmental Management Plan and the activities and budget are based on the need-based assessment based on the conducted public hearing and demand raised by locals. It has been updated as given below:</p> <table border="1" data-bbox="507 725 1402 2009"> <thead> <tr> <th rowspan="2">S · N o ·</th> <th rowspan="2">Particulars</th> <th>Capital Cost (in Lakh)</th> <th>Recurring Cost (in Lakh)</th> </tr> <tr> <th>Proposed</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)</td> <td>12.50</td> <td>2.00</td> </tr> <tr> <td>2</td> <td>Pollution Monitoring for Air, Soil, Water & Noise (Total 7 locations including mine)</td> <td>7.00</td> <td>1.50</td> </tr> <tr> <td>3</td> <td>Occupational Health & Safety</td> <td>3.00</td> <td>1.50</td> </tr> <tr> <td>4</td> <td>Green Belt Development</td> <td>7.50</td> <td>3.50</td> </tr> <tr> <td>5</td> <td>Miscellaneous (Fencing, protection, regeneration, and maintenance of safety zone)</td> <td>5.00</td> <td>1.50</td> </tr> <tr> <td colspan="2">Sub-Total (S. N 1 to 5)</td> <td>35.0</td> <td>10.00</td> </tr> <tr> <td>6</td> <td colspan="3">Activities under CER* in light of MoEF&CC's OM dated 30.09.2020 are as given below:</td> </tr> <tr> <td>a</td> <td>Organize Medical Camps in nearby villages of Bagiaburu and Uliburu with free medicine distribution and medical check-up (Twice a Year).</td> <td>5.00</td> <td>2.00</td> </tr> <tr> <td>b</td> <td>Sanitation & Drinking Water supply (supply of drinking water, construction/ installation community toilets for mails & females in Govt. School at Uliburu & Bagiaburu Villages (Govt. Primary School, Uliburu).</td> <td>3.00</td> <td>1.00</td> </tr> <tr> <td>c.</td> <td>Employment assistance to locals in skill development/ health education training/ vocational training programmes for unemployed youth /women of surrounding villages of Bagiaburu & Uliburu.</td> <td>3.00</td> <td>1.00</td> </tr> <tr> <td>d</td> <td>Scholarship Programme for Meritorious students of Nearby villages of Bagiaburu & Uliburu.</td> <td>2.50</td> <td>0.50</td> </tr> <tr> <td>e</td> <td>Providing infra. like construction of additional classrooms, furniture, support to special children education etc. in nearby school's villages of Bagiaburu & Uliburu.</td> <td>3.50</td> <td>1.00</td> </tr> <tr> <td>f.</td> <td>Development of Roads (Uliburu village road) and Support for locals in transportation & other related business.</td> <td>5.00</td> <td>2.00</td> </tr> <tr> <td colspan="2">Sub-Total (S. No. 6 a to 6 f)</td> <td>22.00</td> <td>7.50</td> </tr> </tbody> </table>	S · N o ·	Particulars	Capital Cost (in Lakh)	Recurring Cost (in Lakh)	Proposed	Proposed	1	Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)	12.50	2.00	2	Pollution Monitoring for Air, Soil, Water & Noise (Total 7 locations including mine)	7.00	1.50	3	Occupational Health & Safety	3.00	1.50	4	Green Belt Development	7.50	3.50	5	Miscellaneous (Fencing, protection, regeneration, and maintenance of safety zone)	5.00	1.50	Sub-Total (S. N 1 to 5)		35.0	10.00	6	Activities under CER* in light of MoEF&CC's OM dated 30.09.2020 are as given below:			a	Organize Medical Camps in nearby villages of Bagiaburu and Uliburu with free medicine distribution and medical check-up (Twice a Year).	5.00	2.00	b	Sanitation & Drinking Water supply (supply of drinking water, construction/ installation community toilets for mails & females in Govt. School at Uliburu & Bagiaburu Villages (Govt. Primary School, Uliburu).	3.00	1.00	c.	Employment assistance to locals in skill development/ health education training/ vocational training programmes for unemployed youth /women of surrounding villages of Bagiaburu & Uliburu.	3.00	1.00	d	Scholarship Programme for Meritorious students of Nearby villages of Bagiaburu & Uliburu.	2.50	0.50	e	Providing infra. like construction of additional classrooms, furniture, support to special children education etc. in nearby school's villages of Bagiaburu & Uliburu.	3.50	1.00	f.	Development of Roads (Uliburu village road) and Support for locals in transportation & other related business.	5.00	2.00	Sub-Total (S. No. 6 a to 6 f)		22.00	7.50
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		Grant Total	57.00	17.50
		Note: *Activities proposed under CER will be undertaken in 3 year's time only.		
1 6	The Project Proponent needs to submit the current status of the court case filed by the State Govt. in the JMFC Court, Barbil, Odisha vide case no. 115/2013 dated 30/07/2013 U/s 15 of the Environment (Protection) Act, 1986.	<p>The Project Proponent has submitted that at present court case is pending at JMFC, Barbil, since 2013. State Govt. of Odisha has initiated the case but not taking necessary steps for hearing. M/s OMDC is taking steps to file a petition before Hon'ble High Court, Odisha to dismiss the matter in favour of PP as EC guidelines have been complied.</p> <p>Further, PP submitted that however, for EC violation, the penalties raised by Govt. of Odisha under direction of Hon'ble Supreme Court of India have already been paid and permission to resume mining operation subject to availability of statutory clearance has also been obtained. PP also submitted the copy of the court case filed by the State Govt. in the JMFC Court, Barbil, Odisha vide case no. 115/2013 dated 30/07/2013 u/s 15 of the Environment (Protection) Act, 1986.</p>		
1 7	The Project Proponent needs to submit the copy of the State Govt. of Odisha vide order no. III(A)SM07/20139(pt)/10423/S M, Bhubaneswar dated 07.12.2021 with respect to extension of validity of mine lease. PP also needs to submit the copy of Forest clearance dated 26.02.1998 and	<p>The Project Proponent has submitted the copy of the order issued by the Govt. of Odisha, Steel & Mines Department vide Order No. 10423/III(A)SM-07/2023(pt)/ SM, Bhubaneswar, dated 07.12.2021 stating that the State Govt. hereby pleased to extend the validity period of Bagiaburu Iron Ore mines of M/s OMDC over an area of 21.52 ha in Keonjhar District from 11.10.2021 to 10.10.2041.</p> <p>The Project Proponent also submitted the copy of Forest Clearance granted by the Ministry of Environment & Forests vide letter no 8-236/96-FC dated 26.02.1998 under section-2 of the Forest (Conservation) Act, 1980 for diversion of 17.083 ha of forest land for renewal of mining lease of M/s OMDC Ltd. for a period of 20 years co-terminus with ML under MMDR Act 1957 and with effect from the date of expiry of previous lease. PP submitted the copy of in-principle approval granted by Ministry of Environment and Forests, Eastern Regional Office vide No. 5-ORC164/2013-BHU dated 21.11.2013 for diversion of 21.52 ha of forest land in Uliburu Reserve Forest (including 2.107 ha for safety zone) for iron ore mining in Bagiaburu Iron Ore Mines by M/s Orissa Mineral Development Corporation Ltd in Keonjhar District, Odisha during 3rd RML period.</p> <p>Further, the Project Proponent submitted the copy of the Demand Notice raised from the Office of the Deputy Director</p>		

<p>21.11.2013, Demand Notices raised from the Office of the Deputy Director of Mines, Joda Circle and Payment Proof of the demand raised against Mining Plan/CTO vide dated 31.01.2019 and 05.03.2019 in PARIVESH portal.</p>	<p>of Mines, Joda Circle vide Lr .No: 4088/Mines, dated 02.09.2017 to pay the compensation of Rs. 19,68,86,067/- (Rupees Nineteen Crore Sixty Eight Lakhs Thousand Sixty Seven Only) under Section 21(5) of MMDR Act, 1957 for production without/in excess of the EC as rationalized by the CEC, in pursuance to the judgment dated 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause Vs UOI and others. PP also submitted the copy of demand raised by the Office of the Deputy Director of Mines, Joda Circle vide letter no.5252 dated 23.10.2017 demanded to pay sum of Rs. 7,22,791/- (Rupee's Seven Lakhs Twenty Two Thousand Seven Hundred Ninety One Only) towards compensation under Section 21(5) of MMDR Act, 1957 for production without/in excess of the mining plan & CTO as rationalized by the CEC, in pursuance to the judgment dated 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause vs. UOI and others.</p> <p>PP vide letter dated 04.01.2018 informed the Deputy Director of Mines regarding the Payment of demand with protest of Rs.35,95,337 (Rupees Thirty Five lakhs Ninty Five Thousand Three Hundred Thirty Seven) made vide e-challan reference Id: 27DE0E010C and no.8443/237-30/12/2017 against the demand of Rs 10,20,23,549 vide letter no 6098 dtd 13.12.2017.</p> <p>PP also vide letter dated 24.11.2018 informed the Deputy Director of Mines regarding the payment of demand under protest of Rs. 23,07,83,836/- [Rs. 5,85,63,282/- (e-challan reference Id: 2A2B640CDA and no.8443/984. 17/11/2018), Rs. 9,00,00,000/- (e-challan reference Id: 2A2B640D0B and no.8443/986-17/11/2018), Rs. 8,22,20,554/- (echallan reference Id: 2A2B640142 and no. 8443/987-17/11/2018).</p> <p>PP also vide letter dated 01.02.2019 informed the Deputy Director of Mines regarding the payment of demand under protest towards Mining Plan & Consent to Operate for an amount Rs 7,22,791. PP also submitted the copy of letter dated 01.03.2019 submitted to the Deputy Director of Mines regarding the interest payment of demand towards Mining Plan & Consent to Operate for an amount Rs 1,73,707.00.</p>
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- v. The project was granted Terms of Reference (ToR) by the Ministry vide its Lr No. F. No. 23- 205/2018-IA.III (V) dated 09.03.2020 based on recommendation of EAC(V) in its meeting held during 25-26, June 2019.

vi. Details of Mine lease:

- a. The Project Proponent submitted that the initially Bagiaburu mine lease was executed in favour of M/s. OMDC Ltd on 11.10.1971 for a period of 9 years with effect from 11.10.1971 to 30.09.1980.
- b. Then, 1st renewal of mining lease was made on 01.10.1980 with effect from 01.10.1980 to 30.09.1990 which is a deemed renewal.
- c. 2nd renewal of mining lease (RML) was executed on 29.04.2000 for a period of 20 years with effect from 01.10.1990 to 30.09.2010.
- d. 3rd renewal of mining lease was applied on 10.08.2009 for a period of 20 years w.e.f 01.10.2010 to 30.09.2030 as per rule 3 92) of Mining Rules 2015.
- e. Project Proponent submitted that Steel & Mines Department, Govt. of Odisha vide Lr No.III(A)SM-07/20131266/SM, Bhubaneswar, dated 06.02.2020 *inter-alia* mentioned that "the above lease is deemed to be granted for a period of 50 years from 11.10.1971 to 20.10.2021 subject to execution of supplementary lease deed for the balance period within a period of three months from the date of issue of this order subject to availability of the requisite forest clearance. Supplementary lease deed was executed on 07.10.2021 for the period 11.10.1971 to 10.10.2021.
- f. Further, Project Proponent submitted that the Govt., Odisha vide order no. III(A)SM07/20139(pt)/10423/SM, Bhubaneswar dated 07.12.2021 have extended the validity of mining lease for another period of 20 years from 11.10.2021 to 10.10.2041 and Supplementary Lease Deed was executed on 06.07.2022 for the period from 11.10.2021 to 10.10.2041.

vii. Land Use/Land Cover of the Mine Lease Area:

Forest land	21.52 ha
Total Mining lease area (MLA)	21.52 ha

viii. Details of Mining Plan:

Modification of Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	RMP/A/06/ORI/BHU/2021-22
	Date	22.07.2021
	Mineral	Iron Ore
	Mine lease area	21.52 ha
	Validity	Validity of this document shall expire on 10.10.2021 and further validity of this document is subject to the decision of the State Government on extension of mining lease as communicated vide Director of Mines letter No. MXIII(d)01/2019/5292/DM dated 15.07.2021.
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining	
Total Geological Reserves	49,41,794 MT	
Mineable Reserves	37,92,932 MT	

Life of mine	11 years (May exceed on further exploration)
Bench Height	6 m
Bench Width	9m or more than the height of the bench
Individual bench slope	75° - 85°
Overall pit slope	45°
Drilling/Blasting	The benches having 6 m height will be drilled for blast holes by 115mm dia DTH drills fed by compressed air at 12.5 cum/min at 14.5 kgf/sq.cm pressure. Explosive will be used of Class II booster and Column charge with accessories like OD, ED/ Nonel, Excel, Safety Fuse and Detonating cord. Storage of explosive will be at magazine having license no. E/EC/OR/22/26/E/12708 with in Thakurani lease of M/s OMDC Ltd.
Crushing/Screening	Project Proponent submitted that during the plan period, dry crushing & screening process will be adopted in the mine lease area for production of sized ore. PP proposes to install 270 TPH crushing and screening unit for processing of ROM. Lumps and fines will be dispatched through trucks after weighing as per the demand of the consuming industries. Due to dry processing there will be no generation of tailings.
RoM output size	Project Proponent reported that the various finished products of the screening and crushing units are 0-10mm, 10-40mm, + 5-18mm and 0-5mm.
Transportation details	Project Proponent submitted that the Ore will be transported from quarry site to screen and crushing site for processing by 20 Tonne dumpers and waste materials will be dispatched from quarry to dumping site by using same capacity dumpers. The sized materials was loaded mechanically and transported further by the trucks to the steel and sponge iron plants mostly located in the State.
Waste	<p>Project Proponent reported that due to earlier mining operation three waste dump has been created covering an area of 1.407Ha.</p> <p>During this plan period, a total of 1,35,865 cu.m of waste will be generated. Out of this, 10% i.e. 13,586.50cu.m will be utilized for road maintenance and balance 1,22,278.50 cu.m will be disposed over the existing dump in two terraces with an average height of 10m for each terrace. An additional area of 1.00 Ha. will be required for disposal of waste during the plan period.</p> <p>During conceptual period, 1,40,240 cu.m wastes will be generated. Out of which about 10% i.e. 14,024 cum will be utilized for road maintenance. Balance 1,26,216 cum will be utilized for back filling of mined out land. During conceptual period, back-filling will be done at southern part of the lease.</p>
Mineral Rejects	Project Proponent reported that during ensuing plan period,

	<p>a total of 5,72,725MT of Mineral reject will be generated. The generated Mineral reject during the Plan period will be temporarily stacked at earmarked site and blended with high grade iron ore and sold to the consumers as per requirement.</p> <p>Beyond plan period mineral reject i.e. 45-58% Fe will be generated. These mineral reject will be sold to the market by blending with high grade iron ore. The mineral reject generated will be stored for a short period as per requirement. However, temporary mineral reject stack yard has been proposed during planned as well as beyond planned period.</p>
Intersection of Groundwater table	<p>Project Proponent reported that the water table exists at a depth of 10m (455 MSL) in rainy season & at 15m (450 MSL) MSL in dry season from general surface level (465 MSL). There is no possibility of interception of groundwater table in present plan period.</p>

ix. Water requirement:

Total water requirement	50.0 KLD	Particulars	Requirement	Source
		Mining operations including dust suppression and plantation	40.0 KLD	Nalada pond of M/s OMDC
		Domestic Use	10.0 KLD	Bore well
Permission	<p>Project Proponent submitted the No Objection Certificate (NOC) obtained from Central Ground Water Authority (CGWA) vide CGWA/NOC/MIN/ORIG/2020/8658 dated 21.09.2020 for Groundwater Abstraction of 10.0 m³/day for the period upto 20.09.2022.</p>			

x. Nearest village/town/highway/railway station/water bodies/monument/mines/industries

Particulars	Particular's Name	Distance & Direction
Nearest Village	Barbil	0.94 km, S
	Belkundi	1.44 km, E
Highway	SH-10B	0.64 km, ESE
	SH-4	2.80 km, N
Water bodies	Karo River	2.69 km, W
	Bolani Reservoir	4.53 km, SW

xi. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/ Letter/Remarks

Forest Land	Yes	<p>The entire mine lease area of 21.52 ha is forest land.</p> <p>Project Proponent submitted that the Stage-II FC was granted by the Ministry vide letter no 8-236/96-FC dated 26.02.1998 over an area of 17.083 ha for a period of 20 years co-terminus with ML under MMDR Act 1957 and with effect from the date of expiry of previous lease.</p> <p>PP also submitted that Stage - I FC was granted by the Ministry vide letter No-5-ORC164/2013-BHU dated 21.11.2013 and Stage-II Forest Clearance was granted by MoEF&CC, Integrated Regional Office, Bhubaneswar vide order no. 5-ORC164/2013-BHU dated 17.09.2021 for diversion of 21.52 ha of forest land in Uliburu Reserve Forest (including 2.107 ha for safety zone) for iron ore mining in Bagiaburu Iron Ore mines by M/s Orissa Minerals Development Company Limited.</p>
National Park	No	-
Wildlife Sanctuary	No	
Biosphere Reserves	No	
Wildlife corridors	No	
Tiger/Elephant reserves	No	
Schedule-I species	Yes	Elephant & Sloth Bear
Wildlife Conservation Plan		Project Proponent submitted the site-specific Wildlife conservation plan approved from the Office of Principal Chief Conservator of Forests (Wildlife) and Chief Wildlife Warden, Orissa vide memo no. 854/1WL(C)SSP282/2010 dated 05.02.2011 with financial forecast of Rs 52.0 Lakhs.

xii. The Project Proponent submitted that an area of 7.274 Ha i.e. more than 33% will be developed as green belt area till the conceptual stage. Additionally, 1.28 Ha. backfilled area will also be planted. At ultimate life, a total area of 21.11 Ha will be under plantation and 0.41 Ha will be left for public use. Survival rate in the area will be maintained at not less than 90%. PP reported that during the plan period an area of 1.70 ha will be developed under plantation by planting 1,700 no. of saplings. PP earmarked a budget of Rs. 7.50 Lakhs as Capital cost and Rs. 3.50 Lakhs as recurring cost towards development of greenbelt.

xiii. Baseline Details:

The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Monsoon i.e., October to December, 2019. The Monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.

Period	October to December, 2019				
AAQ parameters at 7 locations	Pollutant	Min, µg/m ³	Max, µg/m ³	98 %ile, µg/m ³	Standard, µg/m ³
	PM10	48.99	77.00	75.71	100
	PM2.5	27.13	53.23	52.32	60
	SO2	6.02	10.58	10.36	80
	NOx	11.80	22.89	22.03	80
AAQ modeling	Pollutant	Baseline Concentration, µg/m ³	Incremental Concentration, µg/m ³	Total GLC, µg/m ³	Standard
	PM10	68.26	4.52	72.78	100
	PM2.5	42.71	3.3	46.01	60
	SO2	9.82	2.77	12.59	80
	NOx	17.70	5.03	22.73	80
Noise level at 7 locations	Day Time: 47.7 to 54.5 Leq dB (A) Night Time: 39.0 to 53.4 Leq dB (A)				
Ground water quality at 5 locations	Project Proponent reported that the pH of the ground water samples ranged from 5.52 to 6.53, which is between the acceptable pH limit for drinking water. Fluoride Concentration is in range of 0.3 to 0.5 mg/l. which is under permissible limit. The concentration of Total Dissolved Solids (TDS) & Total hardness observed in different ground water samples are in range of permissible category stipulated by Bureau of Indian standards. From the above data it is observed that all parameters are within permissible limit of drinking water standard.				
Surface water quality at 2 locations	PP reported that the BOD value ranged from 1.3 to 1.5 which indicate very low organic pollution load. All samples have BOD values are within prescribed limit (<30.0 mg/l as in IS 10500:2012). Chemical Oxygen Demand (COD) observed <5 which indicates low level of organic pollution load in term of COD.				
Soil quality at 7 locations	PP reported that the pH values of the collected samples were in the range of 6.62 to 7.86, organic matter in the range of 0.56 (%) to 0.87(%), water holding capacity in the range of 18.1 to 30.4 %, potassium in the range of 0.003% to 0.007%, total nitrogen in the range of 0.002 to 0.005%, bulk density in the range of 1.08 to 1.14 gm/cc. These all parameter indicates that the soil is not so fertile in this area.				
Traffic Survey	PP reported that the total Iron ore handling in the mine will be				

	max. 3,60,000 TPA based on 300 working days per annum. Only 10 trips hourly vehicle traffic will be increased due to expansion with tipper capacity@10t or 6-7 trips @ 18t capacity.
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xiv. Public Hearing (PH) Details:

Advertisement for PH with date	The New Sunday Express and The Dharitri on 27.03.2021 The New Sunday Express and The Dharitri on 19.06.2022
Date of PH	04.05.2021 (Postponed) 21.07.2022 (Reschedule of Public hearing)
Venue	11.00 AM in Barbil Village (U.No. 7, Khata No.483, Plot No. 1343/1772, Kissam-Gharabari-II,Area-Ac.440) of Keonjhar District
Chaired by	Sri Jadumani Mahala, IAS (SAG), Additional District Magistrate (Revenue), Keonjhar
Main issues raised during PH	Education, Employment, Compensatory afforestation, protection of waterbodies such as river & nallahs, control of pollution, water sprinkling for dust suppression, monitoring the condition of road, Generation of Dust during drilling, blasting and transportation, better facilities for OMDC hospital, supply of clean drinking water, ambulance facility
Budget proposed for addressing issues raised during PH	Capital Cost: Rs.22.0 Lakhs Recurring Cost: Rs 7.50 Lakhs

xv. Details of Past production:

Particulars	Letter no. and date												
Certified past production	The Project Proponent submitted the past production details certified by Deputy Director of Mines, Joda Circle vide Memo no. 496/Mines dated 22.02.2019 for the period 1992 to 2017-18. As per the past production details submitted by the PP, it was observed that the PP started the mining operation from 1992-93 onwards and carried out till 2010-11 and increased the production beyond the base year 1992-93 without obtaining prior environmental clearance and the mine is closed since 2010-11.												
	<table border="1"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>Production (MT)</th> <th>EC capacity (MTPA)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1992</td> <td>547.000</td> <td>-</td> </tr> <tr> <td>2</td> <td>1993</td> <td>Not readily found available</td> <td>-</td> </tr> </tbody> </table>	S. No	Year	Production (MT)	EC capacity (MTPA)	1	1992	547.000	-	2	1993	Not readily found available	-
S. No	Year	Production (MT)	EC capacity (MTPA)										
1	1992	547.000	-										
2	1993	Not readily found available	-										

3	1994	30.000	-
4	1995 to 2000	No production	-
5	2000-01	2000.000	-
6	2001-02	4395.000	-
7	2002-03	45571.000	-
8	2003-04	5500.000	-
9	2004-05	65500.000	-
10	2005-06	5000.000	-
11	2006-07	17835.000	-
12	2007-08	28450.000	-
13	2008-09	5000.000	-
14	2009-10	67100.000	-
15	2010-11	6350.000	-
16	2011-12	-	-
17	2012-13	-	-
18	2013-14	-	-
19	2014-15	-	-
20	2015-16	-	-
21	2016-17	-	-
22	2017-18	-	-

PP reported that the DDM, Joda has raised the demand notice vide no. 4088/Mines dated 02.09.2017 for an amount of Rs. 19,68,86,066/- (Rupees Nineteen Crore Sixty Eight Lakhs Thousand Sixty Seven Only) towards compensation under Section 21(5) MMDR Act, 1957 for production without/in excess of the EC as rationalize the CEC, in pursuance to the judgment dated 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause Vs UOI and others. PP submitted that the demand has been revised to Rs. 10,20,23,549 (Rupees Ten Crore Twenty Lakh Twenty Three Thousand Five Hundred Forty Nine only) by the Office of the Deputy Director of Miner, Joda Circle vide letter no.6098 dated 13.12.2017. PP submitted that the Payment of Rs.35,95,337 (Rupees Thirty Five lakhs Ninty Five ThousandThree Hundred Thirty Seven) made vide e-challan reference Id: 27DE0E010C and no.8443/237-30/12/2017.

PP submitted that the Steel and Mines Department, Government of Odisha vide letter no. 2614/SM dated 05.04.2018 issued a notice to pay the remaining amount along with the interest. Payment of Rs. 23,07,83,836/- made

	<p>towards production without in excess of the EC. Accordingly, PP made a payment of Rs. 5,85,63,282/- (e-challan reference Id: 2A2B640CDA and no.8443/984. 17/11/2018), Rs. 9,00,00,000/- (e-challan reference Id: 2A2B640D0B and no.8443/986-17/11/2018), Rs. 8,22,20,554/- (echallan reference Id: 2A2B640142 and no. 8443/987-17/11/2018)(Total Rs.: 5,85,63,232 +9,00,00,000 + 8,22,20,554 = 23, 07,83,836/-).</p> <p>PP further submitted that the Office of the Deputy Director of Mines, Joda Circle vide letter no.5252 dated 23.10.2017 demanded to pay sum of Rs. 7,22,791/- (Rupee's Seven Lakhs Twenty Two Thousand Seven Hundred Ninety One Only) towards compensation under Section 21(5) of MMDR Act, 1957 for production without/in excess of the mining plan & CTO as rationalized by the CEC, in pursuance to the judgment dated 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause vs. UOI and others. PP submitted that Payment of Rs 7,22,791/- made vide e-challan reference Id: 2C44A2F4E5 and no.8443/1228-31/01/2019 and Payment of Rs 1,73,707.00 towards interest payment vide e-challan reference Id: 2C4ED6C43E and no.8443/30-05/03/2019.</p> <p>The Project Proponent vide email dated 01.03.2023 submitted the letter issued by the State Govt vide Lr.No: 7856/IV(AB) SM-61/2018/SM, Bhubaneswar dated 17.10.2019 stating that M/s OMDC has fully paid along with interest in respect of Bagiaburu mining lease for violation of EC/FC and MP/CTO.</p>
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xvi. Ecological Damage Assessment, Natural Resource Augmentation Plan and Community Resource Augmentation Plan:

The Project Proponent submitted that the damage to environment resulted due to mining activities carried out in absence of valid statutory permissions like Forest Clearance and Environmental Clearance has been assessed by ascertaining weightage matrix index method. Four scale of matrix has been fixed ranging major negative (-3) to none (0). Mining operations carried out at lease were restricted to ML area only within an area of 2.787 ha. Excavation at mine lease has not lead to a change in the overall contour, however temporary impact which is likely to have a remediation at a later stage during

reclamation and backfilling. Surrounding air quality might have been impacted due to dust emissions and vehicle/machinery emissions. No groundwater intersection has been done and no any surface water contamination done due to mining activities. Thus, there was no impact on water environment. Mining activities like drilling and blasting and movement of JCB, Trucks contributed to noise. The impact is temporary and short term. Few trees were cut due to activity of mining at ML site. PP reported that the extent of damage was low to moderate. PP submitted that the Bank guarantee against the remediation will be submitted after finalization of the cost for proposed measures and recommendation of the Hon'ble EAC committee of MoEF&CC, New Delhi. PP also submitted the compensatory budget for remedial measures as given under

A. Remediation Plan & Budgetary Provisions:

S. No	Particulars	Remediation Budget (INR)			Remediation budget
		1 st year	2 nd year	3 rd year	
1	Land Environment (Water sprinkling)	9,00,000	9,00,000	9,00,000	Rs 27,00,000
2	Air Environment (Air Monitoring)	40,000	30,000	30,000	Rs 1,00,000
	Plantation	1,50,000	1,50,000	1,50,000	Rs 4,50,000
3	Water Environment (Rainwater Harvesting (2) at sites)	2,00,000	2,00,000	2,00,000	Rs 6,00,000
	Construction of septic tank & soak pit	4,00,000	3,00,000	3,00,000	10,00,000
4	Noise Environment (Noise monitoring & earbuds/ earplugs for workers safety)	50,000	50,000	50,000	1,50,000
5	Biological Environment (Flora - Plantation (1.0 lakh already done and balance 7.5 lakhs to be done) and green belt development in inside premises)	2,50,000	2,50,000	2,50,000	8,50,000
	Fauna - Conservation of schedule-I species in the study area)	4,00,000	3,50,000	3,00,000	10,50,000
6	Socio-economic Environment (Solar Lights etc.,)	2,00,000	2,00,000	2,00,000	Rs 6,00,000
Total					Rs 75,00,000

B. Natural Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	Avenue Plantation (200 m) - 30 plants on each side of the road	2,00,000	2,00,000	2,00,000	6,00,000
2	Maintenance of Avenue Plantation	50,000	50,000	50,000	1,50,000
3	Installation of Rainwater harvesting at 3 nearby Govt. Schools of Keonjhar District	5,00,000	5,00,000	5,00,000	15,00,000
4	Recharge pond (40 x 30 feet = 1,00,000 each)	6,00,000	6,00,000	6,00,000	18,00,000
				Total	Rs 40,50,000

C. Community Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	RO with water cooler at 5 Govt. Schools	1,50,000	1,50,000	1,50,000	4,50,000
2	6 Computer in 5 Govt. School each year	3,00,000	3,00,000	3,00,000	9,00,000
3	Plantation at public parks in nearby areas	1,50,000	1,50,000	1,50,000	4,50,000
4	Goat farming promotion and financial assistance to locals	2,00,000	2,00,000	2,00,000	6,00,000
5	Poultry farming promotion and financial assistance to locals	3,00,000	3,00,000	1,75,905	7,75,905
6	Mushroom farming	2,00,000	2,00,000	2,00,000	6,00,000
7	Sewing machine distribution to local female for financial stability & income generation	4,00,000	4,00,000	4,00,000	12,00,000
				Total	Rs 49,75,905

D. Total budget for Remediation, Natural & Community Resource Augmentation Plan

S. No	Particulars	Proposed Budget (INR)
1	Remediation Plan	Rs 75,00,000
2	Natural Resource Augmentation Plan	Rs 40,50,000

3	Community Resource Augmentation Plan	Rs 49,75,905
	Total	Rs 1,65,25,905

xvii. Rehabilitation & Resettlement:

R & R details	Project Proponent submitted that this is an existing mine, operative since 1971 as such no displacement of people is envisaged. Hence, R & R plan is not applicable.
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xviii. Court case details:

Court Case	The Project Proponent submitted that the State Govt. filed a case in the JMFC Court, Barbil, Odisha vide case no. 115/2013 dated 30/07/2013 at JMFC, Barbil U/s 15 of the Environment (Protection) Act, 1986.
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xix. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an Affidavit in a non-judicial stamp paper of Rs 100 bearing no M 628233 dated 30.07.2022 stating that the M/s The Orissa Minerals Development Company Limited shall comply with all the statutory requirements & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of Environmental Clearance.
Project Proponent submitted an undertaking dated 17.08.2022	I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief. And I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity/ construction/ expansion has since been taken up.

xx. Details of the EMP:

S. No	Particulars	Capital Cost (Proposed in Rs Lakhs)	Recurring Cost (Proposed in Rs Lakhs)
1	Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)	12.5	2.0
2	Pollution Monitoring (Air, soil, Water, Noise)	7.0	1.5

3	Occupational Health & Safety	3.0	1.5
4	Greenbelt development	7.5	3.5
5	Miscellaneous (Fencing, protection, regeneration and maintenance of safety zone)	6.0	1.5
		35.0	10.0

xxi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	0.35 + 0.22
Project Cost	Rs 11.0
Employment	142 persons

3. Observation and Recommendation of the Committee: -

The EAC noted that the instant proposal is for reconsideration of Environmental Clearance (EC) under violation window of Ministry's Notification S.O 804 (E) dated 14.03.2017. The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant.

The Project Proponent informed the EAC that the damage assessment for the air pollutant has been revised by considering the mechanism developed by CPCB and Environmental Prices Handbook EU28 version and the total amounts to Rs 84,59,335. Damage assessment of water resources has been revised referring to Central Ground Water Authority Notification S.O 3289 (E) dated 24th September 2020 for computing the damage occurred during operation period from the year 1993-94 to 2010-11 and the total amounts to Rs.4.3 lakhs approx. Further, the Project Proponent informed the EAC that the amount for Remediation Plan has been revised from Rs 30.0 Lakhs to Rs 75.0 Lakhs, Natural Resources Augmentation Plan revised from Rs 7.50 Lakhs to 40.50 Lakhs, Community Resources Augmentation Plan revised from Rs 6.0 Lakhs to Rs 49.75 Lakhs and the total amount revised from Rs 44.50 Lakhs to Rs 165.25 Lakhs. The Project Proponent informed the EAC that the no mining activity is proposed in and around the nala. 50m safety zone on each side of seasonal nala will be left. Site Specific Wildlife Conservation Plan was approved by the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Odisha vide letter dated 01.02.2023 at financial outlay of Rs 91.80 Lakhs for a period of 5 years.

The Project Proponent informed the EAC that the payment raised by the Directorate of Mines has been paid and one court case filed by State Govt in the JMFC Court, Barbil, Odisha vide case no: 115/2013 dated 30.07.2013 u/s 15 of the Environment (Protection) Act, 1986 is pending. The EAC asked the Project Proponent to submit the undertaking in this regard. The Project Proponent vide email and letter dated 01.03.2023 submitted an undertaking stating that (i) M/s The Orissa

Minerals Development Company Limited does not have any demand notice pending for payment in the matter of Common cause versus Union of India and Ors. vide Writ Petition (Civil) No. 114 of 2014. All the demand notices served by Directorate of Mines, Govt. of Odisha have been paid and (ii). There is no litigation pending against the project and/or land in which the project is existing except the case filed by State Govt in the JMFC Court, Barbil, Odisha vide case no: 115/2013 dated 30.07.2013 u/s 15 of the Environment (Protection) Act, 1986. The Project Proponent also vide email dated 01.03.2023 submitted the letter issued by the State Govt vide Lr.No: 7856/IV(AB) SM-61/2018/SM, Bhubaneswar dated 17.10.2019 stating that M/s OMDC has fully paid along with interest in respect of Bagiaburu mining lease for violation of EC/FC and MP/CTO.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 1-2 March, 2023 **recommended** the proposal under the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance under the Ministry's Notification S.O 804 (E) dated 14.03.2017 to M/s The Orissa Minerals Development Company Limited for mining of Iron Ore in Bagiaburu Iron Ore mine for increase in Iron Ore production to 0.36 MTPA (ROM), OB/SB/IB: 0.11 MTPA (Total Excavation: 0.47 MTPA) in the mine lease area of 21.52 ha, located at Village Uliburu, Tehsil Barbil, District Keonjhar, Odisha subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. This Environmental Clearance will be valid upto 11 years as the life of the mine is 11 years.
- ii. EAC recommended for an amount of Rs. 165.25/- Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provisions are mentioned below:

Remediation Plan & Budgetary Provisions:

S. No	Particulars	Remediation Budget (INR)			Remediation budget
		1 st year	2 nd year	3 rd year	
1	Land Environment (Water sprinkling)	9,00,000	9,00,000	9,00,000	Rs 27,00,000
2	Air Environment (Air Monitoring)	40,000	30,000	30,000	Rs 1,00,000
	Plantation	1,50,000	1,50,000	1,50,000	Rs 4,50,000
3	Water Environment (Rainwater Harvesting (2) at sites)	2,00,000	2,00,000	2,00,000	Rs 6,00,000
	Construction of septic	4,00,000	3,00,000	3,00,000	10,00,000

	tank & soak pit				
4	Noise Environment (Noise monitoring & earbuds/ earplugs for workers safety)	50,000	50,000	50,000	1,50,000
5	Biological Environment (Flora - Plantation (1.0 lakh already done and balance 7.5 lakhs to be done) and green belt development in inside premises	2,50,000	2,50,000	2,50,000	8,50,000
	Fauna - Conservation of schedule-I species in the study area)	4,00,000	3,50,000	3,00,000	10,50,000
6	Socio-economic Environment (Solar Lights etc.)	2,00,000	2,00,000	2,00,000	Rs 6,00,000
	Total				Rs 75,00,000

Natural Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	Avenue Plantation (200 m) - 30 plants on each side of the road	2,00,000	2,00,000	2,00,000	6,00,000
2	Maintenance of Avenue Plantation	50,000	50,000	50,000	1,50,000
3	Installation of Rainwater harvesting at 3 nearby Govt. Schools of Keonjhar District	5,00,000	5,00,000	5,00,000	15,00,000
4	Recharge pond (40 x 30 feet = 1,00,000 each)	6,00,000	6,00,000	6,00,000	18,00,000
		Total			Rs 40,50,000

Community Resource Augmentation Plan:

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1	RO with water cooler at 5 Govt. Schools	1,50,000	1,50,000	1,50,000	4,50,000
2	6 Computer in 5 Govt.	3,00,000	3,00,000	3,00,000	9,00,000

	School each year				
3	Plantation at public parks in nearby areas	1,50,000	1,50,000	1,50,000	4,50,000
4	Goat farming promotion and financial assistance to locals	2,00,000	2,00,000	2,00,000	6,00,000
5	Poultry farming promotion and financial assistance to locals	3,00,000	3,00,000	1,75,905	7,75,905
6	Mushroom farming	2,00,000	2,00,000	2,00,000	6,00,000
7	Sewing machine distribution to local female for financial stability & income generation	4,00,000	4,00,000	4,00,000	12,00,000
		Total			Rs 49,75,905

Total budget for Remediation, Natural & Community Resource Augmentation Plan

S. No	Particulars	Proposed Budget (INR)
1	Remediation Plan	Rs 75,00,000
2	Natural Resource Augmentation Plan	Rs 40,50,000
3	Community Resource Augmentation Plan	Rs 49,75,905
	Total	Rs 1,65,25,905

- iii. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. 165.25/- Lakhs. Therefore, Project Proponent shall be required to submit a bank guarantee of an amount of Rs. 165.25/- Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
- iv. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
- v. The Project Proponent needs to submit the action taken report on plantation, damage recovery, Natural Resource Augmentation Plan (NRAP), Community Resource Augmentation Plan (CRAP) annually to the Ministry's Integrated Regional Office which should be monitorable and verifiable. The period of addressing these issues is restricted to a period of 3 years.
- vi. The Environmental Clearance will not be operational till such time the Project Proponent complies 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.

- vii. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of 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.
- viii. The natural water bodies and or streams which are flowing in and around the mine lease area should not be disturbed.
- ix. The Project Proponent shall strictly adhere to the timeline proposed in the compliance of recommendation of CSIR-NEERI Report on Carrying Capacity Study for Environmentally Sustainable Iron & Manganese Ore Mining Activity. The progress and the implementation of the same shall be submitted to the Ministry's Integrated Regional Office along with half yearly compliance report.
- x. The Project Proponent shall continue to monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Integrated Regional Office.
- xi. The Project Proponent should install the one Continuous Ambient Air Quality Monitoring Stations (CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- xii. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
- xiii. The Project Proponent shall ensure that the low grade ore shall be effectively utilized. PP should also explore the possibility of utilizing the mineral rejects by blending.
- xiv. The Project Proponent shall take adequate measures to prevent the pilferage of mineral.
- xv. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be

submitted to the Ministry's Integrated Regional Office in the six monthly compliance report.

- xvi. The Project Proponent needs to install the permanent water sprinklers instead of water tankers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
- xvii. The Project Proponent shall carryout the blasting in such a way that the direction of the blasting should be perpendicular to the village and DGMS shall ensure the same.
- xviii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xix. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. The dense plantation shall be carried out in the vicinity of the crusher. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.
- xx. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs. 0.35 Crores. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.
- xxi. The 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 at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
- xxii. The Project Proponent shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.
- xxiii. The Project Proponent shall ensure the survival rate of 95% for planting the gap plantation and new plantation. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure

of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office. Project proponent shall use saplings of 10 ft height for plantation. PP shall make provision for drip irrigation to conserve the water.

- xxiv. The budget of Rs. 22.0 Lakhs to address the concerns raised by the public in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xxv. The Project Proponent needs to provide the RO drinking water supply and also by laying network of pipelines to the local people at free of cost.
- xxvi. The Project Proponent shall provide the rainwater harvesting structure at mine office and quarters to recharge the ground water.
- xxvii. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly.
- xxviii. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
- xxix. The mining lease holders shall, after ceasing mining operations, undertake regrassing 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. The implementation report of the above said condition shall be submitted to the Ministry's Integrated Regional Office.
- xxx. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- xxxi. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.

1.5 Bhavanipuram Limestone Mine-3 of M/s. Deccan Cements Limited (DCL) for expansion in Limestone production from 2.3 MTPA to 4.6 MTPA with Total Excavation of 4.736 MTPA (Limestone : 4.6 MTPA + Top Soil : 0.136 MTPA) in the mine lease area of 183.11 Ha, located at Compartment No. 26 & 27, Saidulnama Reserved Forest, Ravipahad Village, PalakeeduMandal, Suryapet District, Telangana - [Proposal no: IA/TG/MIN/403846/2022; File No. J-11015/375/2015-IA.II(M), Consultant: B.S. Envi - Tech Pvt. Ltd] - Environmental Clearance

The proposal is for grant of Environmental Clearance for mining of Limestone in Bhavanipuram Limestone Mine-3 of M/s. Deccan Cements Limited (DCL) for expansion in Limestone production from 2.3 MTPA to 4.6 MTPA with Total Excavation of 4.736 MTPA (Limestone : 4.6 MTPA + Top Soil : 0.136 MTPA) in the mine lease area of 183.11 Ha, located at Compartment No. 26 & 27, Saidulnama Reserved Forest, Ravipahad Village, PalakeeduMandal, Suryapet District, Telangana.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 16°42'38.70"N - 16°43'26.00"N and Longitude 79°42'26.40"E - 79°43'53.90"E. The mine lease area falls under the Survey of India Toposheet No: 56P/10 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the Interstate Boundary of Telangana - Andhra Pradesh is located at a distance of 1.0 km, SE from the mine lease area and appraised at the Central level.
- iii. The proposal was earlier considered in the 6thEAC (Non-Coal Mining) meeting held during 9th - 11thNovember, 2022 wherein the EAC after detailed deliberations deferred the proposal. Then, the Project Proponent submitted the information on 15.02.2023 in Parivesh portal and accordingly the proposal was reconsidered in the 11th EAC (Non-Coal Mining) held during 1-2 March, 2023.

Based on observation of EAC, compliance of observation of EAC in its meeting held during 9th - 11th November, 2022 made by Project Proponent are detailed below:

S. No	Observation of EAC	Reply by Project Proponent
1	The EAC opined that the Show Cause Notice issued by the Ministry vide letter dated 05.08.2021 is still not revoked by the Ministry and hence the EAC asked the Ministry to seek	The Project Proponent has submitted that the Ministry issued show cause notice on 05.08.2021 for noncompliance of the specific condition (iii) of the EC letter dated 18.10.2007 by conducting Mining activity in Mine-3 simultaneously with

	<p>comments from the Monitoring Division in the Ministry regarding the current status of the Show Cause Notice dated 05.08.2021.</p>	<p>Mine-2 before exhaustion of mineable Ore of Mine-2 and produced Lime Stone 1000 MT in the year 2014-15, 2,29,400 MT in the year 2015- 16 and 1,81,000 MT in the year 2016-17 (Up to the date of 04.01.2017) i.e. before the date of EC letter dated 05.01.2017 for enhancement of production capacity of Mine-3.</p> <p>The Project Proponent replied to the Show Cause Notice on 16.08.2021. As per the request of the Project Proponent with reference to the Show Cause Notice issued by the Ministry vide letter dated 05.08.2021, personal hearing was conducted at the Ministry on 24.09.2021. In the meeting, it was decided that the State Govt. shall be asked to take action under the Common cause for recovering the compensation, as applicable.</p> <p>The Dy. Director of Mines & Geology vide letter dated 12.02.2022 demanded the PP to pay Rs.18,63,64,200/- (Eighteen crores Sixty Three lakhs Sixty Four thousands and Two hundred rupees only) sale price for a Quantity of 4,11,400 in MT under Section 21(5) of Mines & Minerals (Development & Regulation) Act 1957 within (15) days. The Project Proponent deposited the said amount on 28.02.2022. Accordingly, Dy. Director of Mines & Geology vide letter dated 05.03.2022 informed that the M/s. Deccan Cements Ltd paid the demanded amount of Rs.18,63,64,200/- raised by this office for violation of the specific condition (iii) of EC letter dated 18.10.2007 in Mining lease for Limestone, over an extent of 183.11 Hects in Compt No.26 & 27 of Saidulnama R.F Ravipahad Village. Palakeedu Mandal, Suryapet District and further action on the mining lease held by M/s. Deccan Cements Ltd is hereby dropped.</p> <p>Further, the Project Proponent has</p>
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		<p>submitted that the Ministry vide letter dated 13.12.2022 requested the Telangana State Pollution Control Board to calculate and impose environmental compensation as per CPCB guidelines and if required in coordination with CPCB on priority basis.</p> <p>The Telangana State Pollution Control Board vide letter dated 08.02.2023 levied the environmental compensation of Rs 92,80,000 and directed the Project Proponent to deposit within one week.</p> <p>The Project Proponent vide letter dated 09.02.2023 informed the Member Secretary, Telangana State Pollution Control Board stating that amount of Rs 92.80 Lakhs has been deposited by way of Demand Draft drawn from State Bank of India vide DD no. 273764 dated 09.02.2023 in favour of Member Secretary, T.S. Pollution Control Board, Hyderabad.</p>
2	<p>The EAC asked the Ministry to seek comments from the Central Pollution Control Board (CPCB) regarding imposing compensation as applicable for the extant violation, which shall be derived on the basis of calculations as per their guideline which is still pending.</p>	<p>The Project Proponent has submitted that the Ministry vide letter dated 13.12.2022 requested the Telangana State Pollution Control Board to calculate and impose environmental compensation as per CPCB guidelines and if required in coordination with CPCB on priority basis.</p> <p>The Telangana State Pollution Control Board vide letter dated 08.02.2023 levied the environmental compensation of Rs 92,80,000 and directed the Project Proponent to deposit within one week.</p> <p>The Project Proponent vide letter dated 09.02.2023 informed the Member Secretary, Telangana State Pollution Control Board stating that amount of Rs 92.80 Lakhs has been deposited by way of Demand Draft drawn from State Bank of India vide DD no. 273764 dated 09.02.2023 in favour of Member</p>

		Secretary, T.S. Pollution Control Board, Hyderabad.
3	The Project Proponent needs to submit the scenario of flood level study in the likelihood of river water entering into the mine pit and the measures that are required to be taken for prevention of seepage and in the event of seepage to drain out the water through settling tank be also submitted.	<p>The Project Proponent has submitted that a detailed study on Hydraulic, Hydrological and Environmental study of Bhavanipuram Limestone mine was carried out by Department of Civil Engineering, University College of Engineering (A), Jawaharlal Nehru Technological University, Kakinada - Andhra Pradesh.</p> <p>PP has submitted that the study has indicated that “Considering the peak flood discharge in the river Krishna and the corresponding water level as +53.34m which is the HFL in Krishna river, through the present study it is noted that when the HFL behind the dam at Pulichintal is at +53.34 m, the expected water level in the river near the mining area is + 61.15 which is lower than the mine boundary towards the river side (+ 68.02), This establishes that the mining area has no threat of flooding due to backwater from the river Krishna during peak floods”.Another possibility for flooding is due to surface runoff resulting from the rainfall within the mining area. Three first order seasonal streams which are having catchment areas within the mining lease are existing. The peak runoff is estimated to be about 1.168 m³/s.</p> <p>PP also submitted the recommendations made towards better management and production are given below: -</p> <ol style="list-style-type: none"> i. The Garland drains are to be formed as per the alignment. The drains should start at a level of + 70 (Drain A-B) and + 63.00 (Drain C-D). Both the drains are to end at + 60.00 near the pond. The cross-section of the drains should be 1.75 m X 1.0 m and the same should be along the SE boundary of the mining area. The

		<p>slope of the drains are to be 0.0091 and 0.0075 respectively for A-B and C-D.</p> <ul style="list-style-type: none"> ii. In view of the possible erosion of the bed as found through the bed load computations, it is recommended that both the drains are to be lined using suitable lining material. iii. A settling pond / pit of size 20m X 20 m X 1.0 m is to be provided for collecting the surface runoff from the leased area of the mine and its upland area. The water collected in the pond during the period of rains is to be dewatered through mobile water tankers. iv. Since the same pond will accommodate any sediment that enters, from time to time the quantity of silt may be observed and to be removed as per the contingency. v. The filling of the pit with sediment to different capacities as guideline for silt removal. The sediment being of fine particle size can be used as a manure and for clinkering purpose in the cement plant. vi. The water that gets accumulated in the pond is to be pumped out from time to time at regular intervals and the same can be used for wetting of the roads, dust suppression and for gardening in the plant premises. <p>Further, PP submitted that the quality of settling tank outlet will be checked for turbidity once in a week during the monsoon season.</p>
4	The Project Proponent needs to submit the engineering design for construction of garland drains, check dams, retaining wall and siltation ponds and its efficacy to mitigate the potential	The Project Proponent has submitted that based on the study conducted by Jawaharlal Nehru Technological University, Kakinada - Andhra Pradesh. on Hydraulic, Hydrological and Environmental Study of Bhavanipuram

	<p>impact on the water body.</p>	<p>Limestone mine, two garland drains and one settling pond are recommended to construct. A settling pond of 20 m X 20 m X 1.0 m is recommended for a silt load of 0.1875 kg/s which takes 56.8 days for the tank to get completely filled by sediment which is slightly less than two months. PP also submitted the design of the proposed garland drains which are as follows: -</p> <table border="1" data-bbox="794 548 1385 1102"> <thead> <tr> <th>Details</th> <th>Drain A- B</th> <th>Drain C- D</th> </tr> </thead> <tbody> <tr> <td>Length (Distance between starting and end points of the drain) (m)</td> <td>1100</td> <td>400</td> </tr> <tr> <td>RL of Starting Point</td> <td>+ 70.00</td> <td>+63.00</td> </tr> <tr> <td>RL of End Point</td> <td>+60.00</td> <td>+60.00</td> </tr> <tr> <td>Slope of the Drain (m/m)</td> <td>0.0091</td> <td>0.0075</td> </tr> <tr> <td>Width of the Drain (m)</td> <td>1.75</td> <td>1.75</td> </tr> <tr> <td>Height of the Drain (m)</td> <td>1.0</td> <td>1.0</td> </tr> <tr> <td>Depth of Water (m)</td> <td>0.8</td> <td>0.8</td> </tr> <tr> <td>Freeboard (m)</td> <td>0.2</td> <td>0.2</td> </tr> </tbody> </table> <p>The capacity of both the drains is greater than the peak runoff expected. Hence the drains of suggested cross-sections are recommended for laying out along the SE boundary of the mining area.</p>	Details	Drain A- B	Drain C- D	Length (Distance between starting and end points of the drain) (m)	1100	400	RL of Starting Point	+ 70.00	+63.00	RL of End Point	+60.00	+60.00	Slope of the Drain (m/m)	0.0091	0.0075	Width of the Drain (m)	1.75	1.75	Height of the Drain (m)	1.0	1.0	Depth of Water (m)	0.8	0.8	Freeboard (m)	0.2	0.2
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<p>5</p>	<p>The Project Proponent needs to submit the water management plan for an area of 162.42 ha which will be converted into water reservoir and its utilization for benefit of the agriculture and local people and also the schedule of environment monitoring to check the quality of water.</p>	<p>The Project Proponent has submitted that the water body will be formed after reaching the pit limits and void will be filled up with water. An area of 162.48 ha will be converted into permanent water body and will act as a source of surface water to the farmers and nearby villages with water storage depth of maximum of 25 m. Based on the present planning of 4.6 MTPA limestone production, the life of mine will be 17 years. Two mine pits will be formed during the course of mining. The availability of water pits to the farmers are given below:</p> <ol style="list-style-type: none"> i. PIT-1: 97.4 Ha – Available as water reservoir by the end of year 2033. 																											

		<p>ii. PIT-2: 65.08 Ha - Available as water reservoir by the end of 2038.</p> <p>PP also submitted that on exhaustion of the limestone, fencing will be made around the mine pits to ensure safety of animals and human before surrendering the mining lease area to Forest Department. Since the mining lease area is a Forest Land, permitting use of water by the farmers will be the decision of Forest Department once it is surrendered.</p> <p>Further, PP submitted that the water pumping arrangement will be provided at a cost of Rs.10 Lakh, for pumping out water from the mine pit for agriculture activities in the nearby area. During the final closure plan, pump house set-up will be handed over to the Forest Department. Monitoring of water quality after surrendering the land will be in the scope of Forest Department as PP will not have lease with them once it is surrendered.</p>
6	<p>The Project Proponent shall approach the IRO/State Government of Andhra Pradesh for taking necessary measures in order to protect and development of Forests & Wildlife.</p>	<p>The Project Proponent has submitted that they have approached the Forest Dept. for taking necessary measures in order to protect and development of Forests & Wildlife.</p> <p>The Project Proponent has submitted the letter from the Office of the District Forest Officer, Suryapet vide Rc.No. 2106/2017/S5 dated 05.12.2022 and it is informed that the Forest Range Officer, Huzurnagar has reported that he has inspected the mining lease area on 21.11.2022 along with Forest Section Officer and reported on status of mining lease area (183.11 Ha). DFO have also inspected the mining lease area of M/s Deccan Cements Limited on 26.11.2022 along with Forest Range Officer, Huzurnagar. The mining lease is falling</p>

		<p>under Comp. No. 26&27 of Saidulnama RF, 'Janpahad Section, Huzurnagar Range, Suryapet District. The details of Flora and fauna existing in the mining lease area was provided. No adverse effect is reported / observed in the Reserve Forest from any sources due to mining operation. DFO have suggested the following conservation measures:</p> <ol style="list-style-type: none"> i. Formation of Garland Drains, ii. Construction of Check dams and formation of Mini Percolation tanks / Percolation tanks etc., iii. Digging of Contour trench for Greenbelt, iv. Water sprinting to be continuous during movement of vehicles, v. Wet drilling to be continued, vi. Follow MoEF and TSPCB norms for maintaining the dust levels, vii. Avenue plantations and block plantations are to be raised in the existing vacant lands available in the premises of the industrial areas, viii. Blasting should not be done during night times, ix. Strictly follow the Wildlife Protection Act, 1972 Rules better Wildlife protection, x. Strictly follow the Environmental Protection Act Rules, 1986 and xi. Strictly follow the T.S. Forest Act, 1967
7	<p>The Project Proponent needs to increase the capacity of the dumpers in order to reduce the no. of trips and accordingly the traffic study and the line modeling for air quality modeling for transportation activity needs to be revised by considering the revised capacity of the dumpers. The project proponent. needs to deploy</p>	<p>The Project Proponent has submitted that the modeling studies have been carried out for the revised dumper capacity of 60 T and for total production of 4.6 MTPA. The number of trucks reduced from 34 t/hr to 14 t/hr and total lead distance decreased from 102 km/hr to 43 km/hr due to reduction in number of trips on deploying 60 T higher capacity dumper. PP also submitted that the emission rate of NO_x, PM, CO and SO₂ has been decreased considering the dumper</p>

	<p>high capacity drill machine in order to reduce drill machine The revised capacity of the dumpers and drill machine shall be incorporated in the Mining Plan.</p>	<p>capacity of 60 T.</p> <p>PP submitted that the modeling studies have been carried out using AERMO 11.2 version considering the data of Winter season 2021 for which EIA study was carried out. PP also submitted the comparison of the ground level concentrations of AAQ for transportation with 25 T and 60 T dumper for total capacity of 4.6 MTPA Limestone production.</p> <table border="1" data-bbox="794 667 1390 801"> <thead> <tr> <th>Partic ulars</th> <th>PM₁₀ µg/m³</th> <th>PM_{2.5} (µg/m³)</th> <th>SO₂µ g/m³</th> <th>NO_xµ g/m³</th> <th>CO µg/m³</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="4">24 - hourly</td> <td>8 hourly</td> </tr> <tr> <td>25 T</td> <td>6.8</td> <td>2.4</td> <td><1</td> <td><1</td> <td>14.9</td> </tr> <tr> <td>60 T</td> <td>4.0</td> <td>1.6</td> <td><1</td> <td><1</td> <td>5.90</td> </tr> </tbody> </table> <p>Further, PP submitted the isopleths showing the comparison of the GLCs for 25 T and 60 T dumpers for PM₁₀ and CO.</p>	Partic ulars	PM ₁₀ µg/m ³	PM _{2.5} (µg/m ³)	SO ₂ µ g/m ³	NO _x µ g/m ³	CO µg/m ³		24 - hourly				8 hourly	25 T	6.8	2.4	<1	<1	14.9	60 T	4.0	1.6	<1	<1	5.90
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<p>8</p>	<p>The Project Proponent needs to submit the action plan for carrying out gap plantation. PP also needs to submit the action plan for undertaking bench plantation along with timeline and costing.</p>	<p>The Project Proponent has submitted that the plantation all along the mining lease boundary in the safety zone of 7.5m was carried out and about 19,310 no. of trees are planted so far over an area of 7.74 Ha. It is proposed to take up greenbelt over an area of 2.28 Ha as per approved mining plan by planting 8,100 no. of trees by incurring an amount of Rs 8.1 Lakhs.</p> <p>PP also submitted that in addition to the above, an amount of Rs. 45,11, 617/- to implement the scheme of plantation all along the Janpahad- Ravipahad road on both the sides with 50 m width was paid into the CAMPA account (SB A/C No. 344902010105407, Union Bank of India, Sunder Nagar, New Delhi – 110 003) vide UTR No. SBINH13190303450 dated 09.07.2013.</p> <p>Bench Plantation scheme as approved by the Telangana State Forest Department will be implemented by the Forest Department. Further, PP submitted that an amount of Rs. 24,29, 116/- was already paid into the CAMPA account to</p>																								

		implement the scheme of bench plantation (SB A/C No. 344902010105407, Union Bank of India, Sunder Nagar, New Delhi – 110 003) vide UTR No. SBINH13190303 468 dated 09.07.2013.
9	The Project Proponent needs to submit the list of Flora and Fauna vetted by Forest Department.	The Project Proponent has submitted the letter from the Office of the District Forest Officer, Suryapet vide Rc.No. 2106/2017/S5 dated 05.12.2022 and it is informed that the Forest Range Officer, Huzurnagar has reported that he has inspected the mining lease area on 21.11.2022 along with Forest Section Officer and reported on status of mining lease area (183.11 Ha). DFO have also inspected the mining [ease area of M/s Deccan Cements Limited on 26.11.2022 along with Forest Range Officer, Huzurnagar. The mining lease is falling under Comp. No. 26&27 of Saidulnama RF, 'Janpahad Section, Huzurnagar Range, Suryapet District.The details of Flora and fauna existing in the mining lease area was provided. No adverse effect is reported / observed in the Reserve Forest from any sources due to mining operation.
10	The Project Proponent needs to the upload the Wildlife Conservation Plan approved by the Principal Chief Conservator of Forests (PCCF), Telangana in Parivesh.	The Project Proponent has submitted the letter from the Forest Dept. issued by the Principal Chief Conservator of Forests vide Rc.No 5344/2021/FCA-4 dated 18.02.2022 stating that the PCCF (HoFF) & CWLW has submitted the mitigation plan for an amount of Rs.80.00 Lakhs to be spent over for a period of 5 years commencing from 2022-23 and requested to deposit the amount in Biosot account (BioDiversity Conservation Society of Telangana as per the condition no: 10 of Stage-I approval. PP also submitted the receipt of deposit of Rs.80.00 Lakhs towards Conservation plan. Further, PP has submitted the Wildlife Mitigation Plan for the diversion of 8.02 ha of Saidulnama Reserve Forest prepared

		by Dr V. Vasudeva Rao Principal Scientist &Head, All India Network Project on Vertebrate Pest Management, PJTS Agricultural University.
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iv. The details of the previous Environmental Clearance (EC) are furnished as below:

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
23.06.2007	IA/TG/MIN/31399/2007 J-11015/642/2007-IA.II(M)	-	Environmental Clearance for Bhavanipuram Limestone Mine-3 (ML Area:183.11 Ha) with production capacity of 0.3 million TPA located at village Ravipahad Mandal- Nereducerla, District-Nalagonda, Andhra Pradesh	18.10.2007
25.08.2016	J-11015/375/2015-IA.II(M) IA/TG/MIN/31400/2015	October 24-25, 2016	Environmental Clearance for Bhavanipuram Limestone Mine with enhancement of production capacity from 0.3 million TPA to 2.3 million TPA of limestone by M/s. Deccan Cement Ltd., located at village(s)-Ravipahad Mandal-Nereducerla, District-Nalagonda, Telangana (MLA: 183.11 ha)	05.01.2017

v. The details of the previous Terms of Reference (ToR) are furnished as below:

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
30.11.2019	J-11015/375/2015-IA.II(M) IA/TG/MIN/128383/2019	19-20 December, 2019	Terms of Reference for expansion in Limestone production from 2.3 MTPA to 4.6 MTPA with Total Excavation of 4.6 MTPA (Limestone : 4.6 MTPA + Waste/Reject/IB/OB/Top Soil: Nil) of Bhavanipuram Limestone Mine-3 in the mine lease area of 183.11 Ha, located at Saidulnama Reserved	12.02.2020

			Forest [Compartment No. 26 & 27], Ravipahad Village, Palakeedu Mandal, Suryapet District, Telangana by M/s Deccan Cements Limited	
09.08.2021	J-11015/ 375/2015- IA.II(M) IA/TG/MIN/ 221180/202 1	16 th – 19 th August, 2021	Amendment in ToR dated 12.02.2020 for M/s Deccan Cement Limited for change in Total Excavation from 4.6 MTPA to 4.7368 MTPA (Limestone : 4.6 MTPA + Top Soil : 0.136 MTPA) of Bhavanipuram Limestone Mine-3 in the mine lease area of 183.11 Ha, located at, Ravipahad Village, PalakeeduMandal, Suryapet District, Telangana.	20.09.2021

vi. Details of Mine lease:

- a) The Project Proponent submitted that the initially the Govt. of Andhra Pradesh vide G.O Ms. No. 182 dated 16.12.2013 have granted the mining lease for Limestone over an extent of Acres 452.43 gts. (183.11 Ha) for a period of 20 years in favour of M/s Deccan Cements Limited.
- b) Then, the Govt. of Telangana vide G.O Ms. No. 9 dated 12.09.2014 issued amendment in grant of mining lease stating that The words “a period of 20 years” occurred in the Abstract and in Para 4of the G.O.Ms.No.182, Industries and Commerce (M.I) Department, dated 16.12.2013 shall be substituted with the words “a period of 30 years”.
- c) Thereafter, the Govt. of Telangana vide G.O Ms. No. 12 dated 21.02.2017 have extended the lease period upto 50 years from the date of original grant of Mining lease i.e. from 28.12.2013 to 27.12.2063 for the Mining Lease held by M/s.Deccan Cements Limited for Limestone over an extent of Acres 452.43 Gts (183.11 Hectares).
- d) The Project Proponent submitted that the Supplementary Lease deed made on 09.05.2017 between Govt. of Telangana and M/s Deccan Cements Limited for a period of 50 years over an area of 183.11 Ha.

vii. Land Use/Land Cover of the Mine Lease Area:

Private land	Nil
Forest Land	183.11 Ha
Total Mining lease area (MLA)	183.11 Ha

Private land for crusher, workshop & other infrastructure outside the MLA	Nil
Additional information (if any)	Stage-II Forest Clearance was obtained vide letter No. 8-85/2010-FC, vide dated 13.09.2013 under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 183.11 ha. forest land in favour of M/s. Deccan Cement Ltd., Hyderabad for their limestone mining project located in compartments No. 26 & 27 of Saidulnama Reserved Forest of Nalgonda Forest Division in Nalgonda district of Andhra Pradesh.

viii. Details of Mining Plan: -

Approval of Modification in the approved Mining Plan (including Progressive Mine Closure Plan) approved by Indian Bureau of Mines (IBM)	Letter No.	AP/NLG/MP/Lst-73/Hyd
	Date	12.07.2021
	Mineral	Limestone
	Mine lease area	183.11 Ha
	Validity	2021-22 to 2022-23
Mining Parameters	Quantitative Description	
Method of Mining	Open Cast Mechanized mining adopting deep hole drilling and blasting.	
Mineable Reserve	75.026 Million Tonnes	
Life of mine	17 years @4.60 MTPA (Mining Lease period is valid up to 27.12.2063)	
Bench Height	8m	
Bench Width	20m	
Individual bench slope	70°	
Overall pit slope	45°	
Drilling/Blasting	Drilling is being carried out by wagon drills Blast holes having 115mm diameter are drilled at 5° inclination in a pattern of 4 m Burden and 6 m spacing.	
RoM output size	50 mm	
Transportation details	Limestone will be transported by dumpers and unloaded in the crusher (900 tonnes per hour) - at cement plant by a road length of 1.5 km	
Dumpers capacity	35 tonnes Tippers	
Solid waste Generation at end of mine life.	No waste is envisaged from the mine. 0.1 million cu.m soil will be generated during life of mine and will be utilised for afforestation within the mine site.	
Depth of mineral deposit and Mining Depth	Mineral depth: 18 - 20 m bgl. Presently Working Depth: 16 m bgl Ultimate Depth of Mining for the life of mine is 25 m bgl	
Details of intersecting water level	Water table 60 m bgl, Mining operations will not intersect ground water table	

ix. Water requirement:

Total water requirement	250m ³ /day	Fresh water	250m ³ /day
		Treated water	0
Source	River Krishna /existing adjacent Mine pit		
Permission	Renewal of Permission obtained from Irrigation & CAD Department, Government of Telangana, G.O.Ms.No. 13Dated: 30-03-2022 for drawl of 5,00,000 gallons per day from Krishna river to M/s Deccan Cements Limited Ravipahad near Mahankaligudem(V), Palakeedu (M), Suryapet District for a period of 5 years (i.e 25.06.2021 to 24.06.2026).		

x. Nearest village / town/ highway/railway station / water bodies/monument:

Particulars	Particular's Name	Distance &Direction
Nearest village	Ravipahad	0.6 km, SE
Town	Nalgonda	60.3 km, NW
Highway	State Highway (SH - 36) - Hyderabad - Guntur	6.0 km, W
Interstate boundary	Telangana - Andhra Pradesh	1.0 km, SE
Railway station	Janpahad RS	1.0 km, W
Water bodies	Krishna River Musli River Vemuleru River	0.9 km, SE 3.4 km, W 5.9 km, ENE
Monument	None	-

xi. Presence of Environmentally Sensitive areas in the study area:

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	Yes	The entire mine lease area (183.11 Ha) is part of Saidulnama Reserved Forest (Compartment No. 26 & 27). Stage-II Forest Clearance was obtained vide letter No. 8-85/2010-FC, vide dated 13.09.2013 under Section-2 of the Forest (Conservation) Act,1980 for diversion of 183.11 ha. forest land in favour of Deccan Cement Ltd., Hyderabad for their limestone mining project located in compartments No. 26 & 27 of Saidulnama Reserved Forest of Nalgonda Forest Division in Nalgonda district of Andhra Pradesh.
National Park	No	Nil
Wildlife Sanctuary	No	Nil
Eco-Sensitive Zone (ESZ)	No	Nil

/Eco-Sensitive Area (ESA)		
Schedule-I species	No	No schedule – I fauna are present in 10 km radius of mine lease area
Status of Wildlife Conservation Plan	-	-

xii. Green belt/plantation details:

Proposed area for green belt/plantation	Existing: 3.0 Ha Proposed: 17.63 Ha Total:20.63 Ha.
Budget for green plant & plantation till the end of life of mine.	Capital Cost: Rs.112 Lakhs Recurring Cost: Rs. 69 Lakhs
Budget for nursery	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier	5.30
50 m safety zone of nallah, roads, electric lines	Safe Zone of Road and Power line - 11.63 Ha. Safety Zone – Magazine - 3.70 Ha
500 m safety zones of nearest habitation villages	Nil

xiii. Baseline Data: The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Winter Season i.e., December, 2020 to February, 2021. Project Proponent reported that the ambient air quality monitored at 9 locations and the results are within the prescribed limits of NAAQS. Noise levels were monitored at 9 locations and observed that the day equivalent and night equivalent noise levels recorded in plant & mine sites were found to be in the range of 68.3 – 74.4 dB (A) and 53.1 – 67.8 dB (A) respectively. In villages noise levels were found to be in the range of 52.8 – 55.7dB (A) and 41.3 – 44.8 dB(A) respectively. Ground water sample was collected at 8 locations and surface water sample collected at 8 locations. All parameters of ground water samples are well within the acceptable limits of IS 10500-2012 except for Total Dissolved Solids, Total Hardness, Calcium, Magnesium and Total Alkalinity. These parameters though above acceptable limits, they are well within the permissible limits. Surface water quality values in the study area are within the acceptable limits. Therefore, the surface water available with the study area is fit for the aquatic life and no significant impacts in future are envisaged from the mine site.

xiv. Public Hearing Details: -

Advertisement for PH with date	07.11.2021 “The Hindu” (English News Paper) and “Saakshi” (Telugu News Paper).
Date of PH	09.12.2021
Venue	Cement plant premises which is adjacent from the

	Mine site - Ravipahad Village, Palakeedu Mandal, Suryapet District, Telangana State
Chaired by	Sri. PatilHemanthKeasv, IAS, Addl. Collector & Addl. District Magistrate, Suryapet District, Telangana.
Main issues raised during PH	<ul style="list-style-type: none"> • Provide employment to local youth • Regularize the un-skilled casual labourers into semi-skilled on completion of 4 years of service; • Reduction in the cost of cement bag to the local villages • Provide a school bus up to Mandal headquarters • Utilization of CSR funds to bring awareness among people especially among women over protection of environment through NGOs. • Raise avenue plantation along the road connecting to Janpahad • Provide lying of a bypass road to avert problem of dust generated due to plying of vehicles would be reduced thereby reducing the chance of infections due to dust. • Adopt Mahankaligudem, Sunyapahad, Ravipahad and Komatikunta villages to conduct the health camps • Provide villages to to conduct free health camps at Janpahad, CheruvuThanda and other surrounding villages. • Impart training to the engineers so that they would be able to secure gainful employment elsewhere. • Minimize the pollution levels to the maximum extent possible to ensure healthy surroundings.
Budget proposed for addressing issues raised during PH	Rs. 66.0 Lakhs

xv. Rehabilitation & Resettlement:

R & R details	Not Applicable
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xvi. Previous EC compliance and production details:

Particulars	Letter no. and date
Consent to Operate	Consent & HWA order (renewal) issued by the Telangana State Pollution Control Board vide order no: 220523588038 dated 02.07.2022 for Limestone production of 2.3 Million TPA for the period upto 30th April,2027.
Certified EC compliance report	Certified EC Compliance obtained from Integrated Regional Office, Hyderabad vide

	letter No: ENV/IRO-HYD/CCR-55/A/2022 dated 19.09.2022. Site visit was conducted on 29.08.2022.																																								
Certified past production	<p>Past production details duly authenticated from the Office of the Asst. Director of Mines and Geology, Suryapet vide Lr No.484/M2/2007 dated 23.09.2022</p> <table border="1" data-bbox="715 450 1410 943"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>Dispatch permit, Metric T</th> <th>EC capacity, MTPA</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2014-15</td> <td>2,200</td> <td>0.3</td> </tr> <tr> <td>2</td> <td>2015-16</td> <td>2,29,400</td> <td>0.3</td> </tr> <tr> <td>3</td> <td>2016-17</td> <td>2,52,000</td> <td>2.3</td> </tr> <tr> <td>4</td> <td>2017-18</td> <td>6,22,000</td> <td>2.3</td> </tr> <tr> <td>5</td> <td>2018-19</td> <td>8,60,000</td> <td>2.3</td> </tr> <tr> <td>6</td> <td>2019-20</td> <td>14,40,000</td> <td>2.3</td> </tr> <tr> <td>7</td> <td>2020-21</td> <td>18,36,100</td> <td>2.3</td> </tr> <tr> <td>8</td> <td>2021-22</td> <td>16,00,000</td> <td>2.3</td> </tr> <tr> <td>9</td> <td>2022-23 (upto 31.08.2022)</td> <td>7,68,000</td> <td>2.3</td> </tr> </tbody> </table>	S. No	Year	Dispatch permit, Metric T	EC capacity, MTPA	1	2014-15	2,200	0.3	2	2015-16	2,29,400	0.3	3	2016-17	2,52,000	2.3	4	2017-18	6,22,000	2.3	5	2018-19	8,60,000	2.3	6	2019-20	14,40,000	2.3	7	2020-21	18,36,100	2.3	8	2021-22	16,00,000	2.3	9	2022-23 (upto 31.08.2022)	7,68,000	2.3
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Show Cause Notice under section 5 of the Environment (Protection) Act, 1986	<p>It was observed that M/s Deccan Cements Ltd has violated the specific conditions III of MoEF No. J-11015/642/2007-IA-II(M)pt dated 18.10.2007 by conducting Mining activity in Mine-3 simultaneously with Mine-2 before exhaustion of mineable Ore of Mine-2 and produced Lime Stone 1000 MT in the year 2014-15, 2,29,400 MT in the year 2015-16 and 1,81,000 MT in the year 2016-17 (Up to the date of 04.01.2017) i.e. before the date of Order issued by MoEF No. J-11015/375/2015-1A-II(M)pt dated 05.01.2017 for enhancement of Production capacity of Mine-3, the condition was relaxed in the next EC order dated 05.01.2017".</p> <p>In view of the above, the Ministry vide letter dated 05.08.2021 issued Show Cause Notice to the Project Proponent. The Project Proponent replied to the Show Cause Notice on 16.08.2021.</p> <p>Personal hearing was conducted on 24.09.2021 During the hearing held on 24.09.2021, PP admitted that they have carried out excess mining of limestone during the year 2016-2017, 2017-18 and 2018-19 for a quantity of 14,30,000 MT (2016-17), 11,25,000 MT (2017-18) and 12,02,800 MT (2018-2019) against the approved mining plan quantity of 11,13,099 MT</p>																																								

	<p>(2016-17), 3,00,420MT(2017-18) and 12,00,544(2018-19) in ML-2. It was further, admitted that mining activity was carried out in ML-3simultaneously with ML-2 not complying to the Specific condition (iii) of EC dated 18.10.2007 in order to allow the plant to operate requiring higher capacity of Limestone (2.1MTPA) as was expected initially (0.3MTPA) while applying for the grant of first EC dated 2007. The Committee decided that the State Govt. shall be asked to take action under the Common cause for recovering the compensation, as applicable. Further, with reference to Show Cause Notice dated 16.08.2021 issued by the Ministry for the above cited violation, CPCB shall impose compensation as applicable for the extant violation, which shall be derived on the basis of calculations as per their guideline.</p> <p>Then, the Dy. Director of Mines & Geology issued a Show Cause Notice to the Project Proponent on 30.12.2021. The Project Proponent replied to the Show Cause Notice on 18.01.2022.</p> <p>The Ministry vide letter dated 09.02.2022 requested the Principal Secretary to Government (FAC)Environment, Forests, Science & Technology Department, Telangana to take appropriate action as per the order of Hon'ble SC in the matter in Writ Petition No. 114/2014 in the matter of Common Cause Vs Uol by recovering compensation for the extant violation. Further, the State Govt. shall also recover the amount of environmental compensation calculated on the basis of CPCB prescribed guidelines and approved by CPCB.</p> <p>Then, the Dy. Director of Mines & Geology vide letter dated 12.02.2022 demanded the PP to pay Rs.18,63,64,200/-(Eighteen crores Sixty-Three lakhs Sixty Four thousands and Two hundred rupees only) sale price for a Quantity of 4,11,400 in MT in mining lease Compt No.26 & 27 of Saidulnama R.F Ravipahad Village Palakeedu Mandal over an extent of 183.11 Ha under Section 21(5) of Mines & Minerals (Development & Regulation) Act 1957 within (15) days.</p>
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	<p>The Project Proponent deposited the said amount on 28.02.2022. Accordingly, Dy. Director of Mines & Geology vide letter dated 05.03.2022 informed that the M/s. Deccan Cements Ltd paid the demanded amount of Rs.18,63,64,200/- raised by this office for violation of the specific condition III of MoEF No.J-11015/642/2007-IA.II(M), Dt. 18.10.2007 in Mining lease for Limestone, over an extent of 183.11 Hects in Compt No.26 & 27 of Saidulnama R.F Ravipahad Village, Palakeedu Mandal, Suryapet District and further action on the mining lease held by M/s. Deccan Cements Ltd is hereby dropped.</p>
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xvii. Court Case:

Litigation Details	Remarks
<p>CASE FILED IN NATIONAL GREEN TRIBUNAL (NGT):</p> <ul style="list-style-type: none"> National Green Tribunal (NGT) Judgement issued on case of Vakkanti Koteswar Rao Vs Union of India and Ors in Original Application no. 33 of 2016 Claiming that the mining lease area falls nearer to a Historical place i.e. Janpahad Darga, praying for cancellation of lease for the so said illegal mining along with other allegations. 	<p>Case was disposed on 18.11.2021 by the Hon'ble NGT in favour of M/s Deccan Cements Limited with directions to DCL</p>
<p>CASE FILED IN HON'BLE HIGH COURT – TELANGANA STATE:</p> <ul style="list-style-type: none"> Judgment of Hon'ble NGT was again challenged by the same Petitioner in High Court of Telangana State vide WP no 32902 dated 04.12.2021. The case was listed for hearing on 02/02/2022 wherein the Hon'ble Court has directed with a Stay Order restraining DCL from carrying out any mining activity in respect of mining lease no 3. DCL duly filed the Review Petition on 03.02.2022. 	<p>The Hon'ble High Court of Telangana vacated the Interim Order and allowed DCL to continue the mining operations vide proceedings dated 30.03.2022</p>
<p>PETITION FILED IN HON'BLE SUPREME COURT OF INDIA</p> <ul style="list-style-type: none"> The same petitioner has filed petition at Supreme Court of India for Special Leave to 	<p>The Hon'ble Supreme Court of India has dismissed the petition on 29.09.2022 in favor of M/s Deccan Cements Limited stating that "Since</p>

Appeal (C) vide No. 7248/2022 on the High Court of Telangana interim order issued under WP No. 32902/2021 dated 30-03-2022	<i>the present petition arises out of an interim order, we see no reason to interfere in the matter. The Special Leave Petition is, accordingly, dismissed. Pending applications, if any, also stand disposed of”.</i>
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xviii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: V 929916 dated 26.11.2019 stating that the M/s. Deccan Cements Limited shall comply with all the statutory requirements and judgement of Hon'ble Supreme Court dated the 02 nd August, 2017 in Writ Petition(Civil) no. 114 of 2014 in the matter of common cause versus union of India and Ors.
Project Proponent submitted an undertaking dated 18.10.2022	The Project Proponent submitted an undertaking stating that the information and data submitted is factually correct and Deccan Cements Limited owns the contents of the report.
Consultant submitted an undertaking vide letter dated 18.10.2022	<p>The Consultant submitted an undertaking stating that “M/s B.S. Envi-Tech Pvt. Ltd has complied with all the prescribed Terms of Reference (TOR) issued by Ministry of Environment, Forests & Climate Change (MoEF&CC) in preparation of Final EIA Report for M/s. Deccan Cements Limited for Bhavanipuram Limestone Mine - ML-3 (ML area: 183.11 Ha.) which proposes expansion of Limestone production from 2.3 to 4.6 MTPA with total excavation of 4.736 MTPA (Limestone: 4.6 MTPA + Topsoil: 0.136 MTPA) located at Ravipahad Village, Palakeedu Mandal, Suryapet District, Telangana.</p> <p>The Consultant also certified that this FEIA Report has been evaluated on 19.10.2022 using online/in-house software viz., Plagiarism Checker X - Report (Purchased). The report produced has been analyzed by the system and based on it, I certify that the EIA report produced in accordance with good scientific practice.</p>

xix. Details of the Environmental Management Plan (EMP)

Description	Capital Cost (Rs. in Lakhs)	Recurring Cost (Total upto Life of Mine - 2035)

		(Rs. in Lakhs)
Air Pollution Control Measures - Dust Suppression Measures (Atomized Water spray system and water tankers)	50	85
Environmental Monitoring	0	133.25
Top Soil Management	0	16.45
Greenbelt development	113	109
Drain & Check dam	5	11
Total (Lakhs)	168	354.70

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	2.34 (Including PH Commitments)
Project Cost	10.0
Employment	Existing employment - 48 persons additional employment - 62 persons

3. Observation and Recommendation of the Committee: -

The EAC noted that the instant proposal is for reconsideration of Environmental Clearance (EC). The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent/Consultant informed the EAC that there is no court case pending against the project as on date and an undertaking in this regard will be submitted. The Project Proponent informed the EAC that the specific condition (iii) of the EC letter dated 18.10.2007 has been violated by conducting Mining activity in Mine-3 simultaneously with Mine-2 before exhaustion of mineable Ore of Mine-2. In view of the above, the Ministry vide letter dated 05.08.2021 issued Show Cause Notice to the Project Proponent. The Project Proponent replied to the Show Cause Notice on 16.08.2021.

The Project Proponent also informed the EAC that the Dy. Director of Mines & Geology vide letter dated 12.02.2022 demanded the PP to pay Rs.18,63,64,200/- (Eighteen crores Sixty Three lakhs Sixty Four thousands and Two hundred rupees only) sale price for a Quantity of 4,11,400 in MT under Section 21(5) of Mines & Minerals (Development & Regulation) Act 1957 within (15) days. The Project Proponent deposited the said amount on 28.02.2022. Accordingly, Dy. Director of Mines & Geology vide letter dated 05.03.2022 informed that the M/s. Deccan Cements Ltd paid the demanded amount of Rs.18,63,64,200/- raised by this office for violation of the specific condition (iii) of EC letter dated 18.10.2007 in Mining lease for Limestone, over an extent of 183.11 Hects in Compt No.26 & 27 of Saidulnama R.F Ravipahad Village. PalakeeduMandal, Suryapet District and further action on the mining lease held by M/s. Deccan Cements Ltd is hereby dropped.

Further, the Project Proponent informed the EAC that the Telangana State Pollution Control Board vide letter dated 08.02.2023 levied the environmental compensation of Rs 92,80,000 and directed the Project Proponent to deposit within one week. The Project Proponent vide letter dated 09.02.2023 informed the Member Secretary, Telangana State Pollution Control Board stating that amount of Rs 92.80 Lakhs has been deposited by way of Demand Draft drawn from State Bank of India vide DD no. 273764 dated 09.02.2023 in favour of Member Secretary, T.S. Pollution Control Board, Hyderabad.

The Project Proponent informed the EAC that detailed study on Hydraulic, Hydrological and Environmental study of Bhavanipuram Limestone mine was carried out by Department of Civil Engineering, University College of Engineering (A), Jawaharlal Nehru Technological University, Kakinada - Andhra Pradesh. The study has indicated that considering the peak flood discharge in the river Krishna and the corresponding water level as +53.34m which is the HFL in Krishna river, through the present study it is noted that when the HFL behind the dam at Pulichintal is at +53.34 m, the expected water level in the river near the mining area is + 61.15 which is lower than the mine boundary towards the river side (+ 68.02), This establishes that the mining area has no threat of flooding due to backwater from the river Krishna during peak floods.

The Project Proponent informed the EAC that the dumper capacity has been revised from 25 T to 60 T for total production of 4.6 MTPA and the same has been incorporated in the approval of Review of Mining Plan dated 28.11.2022 for the period 2023-24 to 2027-28. The number of trucks reduced from 34 t/hr to 14 t/hr and total lead distance decreased from 102 km/hr to 43 km/hr due to reduction in number of trips on deploying 60 T higher capacity dumper. The emission rate of NO_x, PM, CO and SO₂ has been decreased considering the dumper capacity of 60 T. The EAC opined that the Project Proponent needs to undertake the mine bench plantation in consultation with research institutes/Forest Research Organisations.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 1-2 March, 2023 **recommended** the proposal under the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance to M/s. Deccan Cements Limited (DCL) for Bhavanipuram Limestone Mine-3 for expansion in Limestone production from 2.3 MTPA to 4.6 MTPA with Total Excavation of 4.736 MTPA (Limestone: 4.6 MTPA + Top Soil : 0.136 MTPA) in the mine lease area of 183.11 Ha, located at Compartment No. 26 & 27, Saidulnama Reserved Forest, Ravipahad Village, Palakeedu Mandal, Suryapet District, Telangana subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. This Environmental Clearance will be valid upto 17 years as the life of the mine is 17 years.

- ii. The Project Proponent shall implement the recommendations of the scientific study carried out by Jawaharlal Nehru Technological University on Hydraulic, Hydrological and Environmental to prevent the mine from inundation. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.
- iii. The Project Proponent shall implement the recommendations of the study of the ground vibrations generated due to blasting conducted by the Department of Mining Engineering, National Institute of Technology (NIT), Surathkal to prevent the impacts on the surrounding structures. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.
- iv. The Project Proponent shall continue to monitor the ground induced blasting vibrations for every blast and the results are to be compared with the limiting values prescribed by Director General of Mine Safety (DGMS). PP shall ensure that the values of "peak particle velocity" and "Air Over Pressure" shall be maintained below the permissible values prescribed by the DGMS, from time to time. The data needs to be maintained and submitted along with the six monthly compliance report.
- v. The Project Proponent should take adequate measures to prevent the fly rock falling onto the nearby village and also the Project Proponent needs to set up a permanent monitoring in the nearby village to monitor the blast vibration.
- vi. The Project Proponent shall carryout the blasting in such a way that the direction of the blasting should be perpendicular to the village and DGMS shall ensure the same.
- vii. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Integrated Regional Office.
- viii. The Project Proponent shall convert the excavated pit of 162.48 ha into water reservoir for benefit of the agriculture and local people. Fencing shall be made around the mined out pits to ensure safety and to prevent the inadvertent entry of men and cattle. The Project Proponent needs to develop plantation around the water reservoir in consultation with the State Forest Department. Project Proponent also needs to monitor the quality of water and shall submit the report quarterly to the Ministry's Integrated Regional Office.
- ix. The Project Proponent shall strictly implement the conservation measures suggested by the DFO vide letter dated 21.11.2022. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.

- x. The Project Proponent needs to undertake the mine bench plantation in consultation with Research Institutes/Forest Research Organisations.
- xi. The Project Proponent shall undertake the avenue plantation on both the sides all along the Janpahad- Ravipahad road with width of 50 m.
- xii. The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office.
- xiii. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 1.68 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Integrated Regional Office.
- xiv. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xv. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment.
- xvi. The 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 at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.

- xvii. The Project Proponent shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.
- xviii. The budget of Rs 0.66 Lakhs to address the concerns raised by the public in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xix. The Project Proponent needs to facilitate the online education system in the schools by providing Wi-Fi connectivity, smart classrooms and desktops/ tablets. PP shall construct a library which shall be made available to the school children as well as local people.
- xx. The Project Proponent needs to renovate and extend the classrooms of Janpahad and Palakeed School within 2 years from the issue of this EC as committed.
- xxi. The Project Proponent needs to review any damage of the crops due to mining activity and accordingly the Project Proponent needs to undertake necessary steps to prevent any damage.
- xxii. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- xxiii. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on Silicosis shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
- xxiv. The mining lease holders shall, after ceasing mining operations, undertake regrassing 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. The implementation report of the above said condition shall be submitted to the Ministry's Integrated Regional Office.

Day 2: 2nd March, 2023 (Thursday)

2.1 Bathiya Limestone Mine of M/s AAA Resources Private Limited for mining of Limestone with production capacity of 4.0 MTPA, Topsoil: 0.41 MTPA, Waste/reject: 4.43 MTPA (Total excavation: 8.84 MTPA) along with the crusher of 1400 TPH in the mine lease area of 266.302 ha, located at Bathiya, Barahiya, Karaundi, Chapna and Tamoria Villages, Tehsil: Maihar, District: Satna, Madhya Pradesh – [F.No: J-11015/44/2020-IA-II(M), Proposal No: IA/MP/MIN/405276/2022, Consultant: Pragathi Labs & Consultants Pvt Limited] – Environmental Clearance (EC)

The instant proposal is for grant of Environmental Clearance of M/s AAA Resources Private Limited for mining of Limestone in Bathiya Limestone Mine with production capacity of 4.0 MTPA, Topsoil: 0.41 MTPA, Waste/reject: 4.43 MTPA (Total excavation: 8.84 MTPA) along with the crusher of 1400 TPH in the mine lease area of 266.302 ha, located at Bathiya, Barahiya, Karaundi, Chapna and Tamoria Villages, Tehsil: Maihar, District: Satna, Madhya Pradesh.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area located between Latitude 24°16'19.675" N - 24°18'46.795" N and Longitude 80°52'42.166" E - 80°55'18.769" E. The mine lease area falls under the Survey of India Toposheet No: 63D/15 and falls in Seismic zone-III.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category 'A' as the mine lease area is greater than 250 ha and appraised at the Central level.

iii. Details of Terms of Reference (ToR):

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
30.09.2020	IA/MP/MIN/176767/2020 J-11015/44/2020-IA-II(M)	November 23-25, 2020&9-11 and 14-15 June, 2021	Terms of Reference to M/s AAA Resources Private Limited for Bathiya Limestone mine with Total excavation: 8.84 MTPA, Limestone: 4.0 MTPA, Waste/reject: 4.43 MTPA	02.07.2021

			Topsoil: 0.41 MTPA in the mine lease area of 266.302 Ha at Bathiya, Barahiya, Karaundi, Chapna and Tamoria villages, Tehsil: Maihar, District: Satna, State: Madhya Pradesh.	
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iv. Details of Mine Lease:

S.no	Grant of PI/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Letter of Intent No F3-8/2011/ 12/1	03.01.2018	Limestone	50 years	Govt. of Madhya Pradesh	266.302
2	Grant of mining lease Lr No AF 3-8/ 2014/ 12/1	13.01.2021	Limestone	50 years	Govt. of Madhya Pradesh	266.302

Details of Mine Lease Deed:

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Mining Lease deed executed on 28/01/2021	28/01/2021	27/01/2071	Limestone	266.302

v. Land Use/Land Cover of the Mine Lease Area:

Private land	258.230 ha
Government land	8.072 ha
Forest land	Nil
Total Mining lease area (MLA)	266.302 ha
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

vi. Details of Mining Plan:

Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	MP/Satna/Limestone/MPLN/G-04/2020-21
	Date	16.09.2020
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	266.302
	Production capacity	4.0 MTPA
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized	
Drilling/Blasting	Spacing: 5.0 m Burden: 3.25 m Depth of hole: 8 m (Sub grade drilling 10% =0.8m) Charge per hole: 50 – 60 kg Powder Factor (t/kg): 5 – 6 Dia. of hole: 115 mm	
Geological Reserves	86.46 million tonnes	
Mineable Reserves	33.96 million tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total excavation: 8.84 Million Tonnes Per Annum (MTPA) includes Topsoil: 0.41 MTPA; Waste/Reject: 4.43 MTPA; Limestone: 4.0 MTPA	
Life of mine	12 years	
Mine Bench Height & Bench Width	8 m and 15-30 m	
No. of Mine Benches	7	
Existing Depth, m bgl	Not applicable	
Ultimate Depth of Mining, m bgl	55 m bgl in block-1, 30 m bgl in block 10	
Ground Water Table, m bgl	Pre-monsoon 11.63 m bgl; post-monsoon 7.06 m bgl	
Details of ground water intersection	Mine workings will intersect water table around 7.06 m during post-monsoon and 11.63 m during pre-monsoon.	
Individual bench slope	80°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	One crusher of 1400 TPH is proposed.	
Mineral Beneficiation	Not applicable	
RoM output size	Max. 600 mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	<p>The limestone after crushing will be dispatched by tipper trucks through road to cement plant located at Bharauli for captive use.</p> <p>Approximate distance is 27 km.</p> <p>Capacity of dumper is 40 tonnes.</p> <p>The ROM limestone will be crushed before being dispatched to the cement plant. Further, till the</p>	

	installation of crusher, sized limestone will be transported to cement plant for captive use.
Generation of Topsoil/OB & its Management during plan period & conceptual period	Top soil generation during plan period - 8,90,455 m ³ and during life of mine - 5.02 million m ³ . The same will be stored temporarily for future use in plantation / reclamation.
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	During the first five years period, 27,53,100 m ³ of waste will be generated. The part quantity will be used for preparing protective bund, crusher ramp etc. and remaining will be stored in temporary waste dump. Upto conceptual period 36.70 million m ³ OB will be generated. Entire quantity will be used for backfilling of mine pits.

vii. Water requirement:

Total water requirement	412 KLD	Fresh water	412 KLD
		Treated water	Nil
Source	Ground water during initial years of operation.		
Permission for withdrawal/intersection along with details of grant and its validity	Application has been submitted to CGWA for obtaining NOC vide application no. 21-4/1658/MP/MIN/2022 on 15/11/2022 and is in under progress.		

viii. Nearest village / town/ highway/railway station / water bodies:

Particulars	Particular's Name	Distance & Direction
Village	Tamoriya near block 1 and Barahiya near block 10	Adjacent
Town	Amarpatan (Block-1, Block-8 and Block-10)	5.8 km- E, 8.6 km-ENE and 9.0 km-W
Highway	Maihar - Amarpatan/Rewa road	0.1 km, N
Interstate Boundary	Uttar Pradesh	Approx. 67 km, N
Railway station / railway line	Maihar	11.6 km, W
Water bodies	Serainjinala Tamas/Tons river Bihar river Bakaulinala Pathananala	1.9 km, S 6.9 km, W 7.6 km, SE 8.0 km, N 9.2 km, WNW
Forest	Sirgo RF; Papra RF	8.2 km-NE; 9.2 km-SE

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Area/Environmental Zone	Land/Protected Sensitivity	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr. no, date of grant and remarks

Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	PP submitted that there is no forest land within ML area. PP also submitted the letter from the Forest Dept. Satna, MP vide letter no. 2409 dated 04-03-2021 in this regard.
National Park	No	PP submitted the letter from PCCF (Wildlife and Chief Wildlife Warden, MP) vide Lrno. No./B.Pra/Ma.Chi/Mine-85/ 3211 dated 08-04-2021 stating that there is no Protected Area / Tiger Reserve / Sanctuary / Biosphere / Wildlife Corridor / Ramsar Site / Elephant Reserve / Eco Sensitive Zone within 10km radius and also submitted the authenticated map of 10km radius from the Forest Dept. in this regard.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No. and name of schedule-I species with authenticated letter)	No	PP submitted the List of Flora and Fauna authenticated by Forest Dept., Satna.
Wildlife Conservation Plan	No	Not applicable

x. Details of Green belt/plantation:

Proposed area for green belt/plantation and no. of saplings proposed	Greenbelt:46.64 ha and 69,960 numbers Backfilled area: 134.85 ha and 2,02,275 numbers
Budget for green plant & plantation till the end of life of mine.	₹2.722 Cr.
Budget for nursery	Included in the above figure
Details of existing plantation and its survival rate	Not applicable
No. of tree cuts in the mine lease area and compensatory afforestation	Nil and compensatory afforestation is not applicable.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	46.64
50 m safety zone of nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	

xi. Baseline data:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	December 2020 to February 2021
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter
Predominant Wind direction (From)	North-West

Ambient Air Quality (no. of locations) and results	10 locations Result summary: PM ₁₀ : 30.7 µg/m ³ - 61.7 µg/m ³ PM _{2.5} : 18.2 µg/m ³ - 36.9 µg/m ³ SO ₂ : 10.8 µg/m ³ - 18.1 µg/m ³ NO ₂ : 14.1 µg/m ³ - 24.8 µg/m ³		
Noise level (no. of locations) and results	10 locations Result summary: Day Time (L _{day}) noise level: 41.8 dB (A) - 55.6 dB (A) Night Time (L _{night}) noise level: 38.4 dB (A) - 52.8 dB (A).		
Water Quality (no. of locations) and results: 11 Locations (9 ground water and 2 surface water)	Parameters	Surface water (5 locations)	Ground water (5 locations)
	pH at 25°C	6.86 - 6.94	7.01 - 7.62
	Total Dissolved Solids, mg/l	-	371.5 - 960.1
	Chloride as Cl-, mg/l	48.6 - 61.2	86.5 - 282.6
	Total Hardness, mg/l	154.22 - 168.54	186.21 - 440.35
	DO, mg/l	5.6 - 6.1	-
	BOD, mg/l	less than 3 mg/l	-
	Fluoride as F, mg/l	0.4-0.5	0.6 - 1.2
	Sulphates as SO ₄ ,mg/l	31.8 - 32.6	34.6 - 112.5
Soil Quality (no. of locations) and results: 10 locations	Parameters		Observed Values
	pH		4.92 - 7.02
	Texture		Sandy clay to clay
	Electrical Conductivity (µS/cm)		82.4 - 302.1
	Organic Carbon (%)		0.19 - 0.46
	Available Nitrogen as N (Kg/Ha)		38.5 - 56.4
	Available Phosphorus (Kg/Ha)		38.6 - 66.9
	Potassium (Kg/Ha)		126.9 – 210.5
Hydro geological study and results	Hydrogeological investigations were carried out in the study area during 27-30 November 2020 and 22-24 April 2021. Mine workings will intersect water table around 7.06 m during post-monsoon and 11.63 m during pre-monsoon. The block is falling under safe		

	<p>category as per GWRA, 2020. The total rain water available from the rain water harvesting from roof top areas and open area works out to 0.017 MCM (0.007 MCM + 0.010 MCM), which can meet 14.05% of nondomestic requirements (0.122 MCM) of the project. Recharge due to settling-cum-recharge ponds works out to 0.003 MCM. An amount of 7,93,347.40 m³ (0.793 MCM) of rainfall collected from the reservoir area will be available for recharge resulting in post mining water table recovery in the area.</p>
<p>Traffic study (no. of locations) and results: 8 locations</p>	<p>PP submitted that about 334 trucks per day would be required for transportation of limestone from mine to the captive cement plant. The traffic contribution from mine to the road network will thus is the 'to and fro' movement of 668 vehicles per day, which is equivalent to 2004 PCU per day (taking a PCU factor of 3 per vehicle). With present level of traffic route in three locations and the predicted increase in existing traffic due to the project, adequacy of road/highway during operational phase of the mine has been estimated by comparison with the recommendations stipulated by Indian Road Congress (IRC).</p> <p>The total traffic load after implementation of the mining project will be well within the IRC stipulated maximum load of 35,000 PCU/day for a four lane highway with median separator (NH-7). The estimated peak traffic in terms of PCUs is compared with the stipulated standards by IRC for traffic capacity of the roads and it can be observed that the existing road network is adequate.</p>

xii. Public Hearing (PH) Details:

<p>Advertisement for PH with date (pl. mention name of major national daily and one regional vernacular daily newspaper)</p>	<p>DainikBhaskar, PatrikaSamachar, Nav Swadesh dated 28.05.2022 and 29.06.2022</p>
<p>Date of PH</p>	<p>20.07.2022</p>
<p>Venue</p>	<p>Near Gokul Gaushala, Village Bathiya, Tehsil Maihar, Dist. Satna, Madhya Pradesh.</p>
<p>Chaired by</p>	<p>Additional District Magistrate</p>
<p>Main issues raised during PH</p>	<p>Pollution control, Environment management, Blasting, Land</p>

	compensation, Employment, Road transportation, beautification of ponds, drinking water, school,
Budget proposed for addressing issues raised during PH	Rs. 122.50 Lakhs for 3 years

xiii. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent submitted that the total mine lease area is 266.302 ha, out of which 258.230 Ha is private land covering 5 villages Bathiya, Barahiya, Karaundi, Chapna and Tamoria. PP reported that there are 639 PAFs (only land losers). The land purchase for the proposed limestone project and the rehabilitation and resettlement of project affected families will be implemented under the provisions of the Central and State Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Acts, Rules & Policies. PP also submitted that willing seller and willing buyer will be adopted, where no land owner is compelled to sell their lands and whoever is ready, they will be paid adequate compensation based on mutually agreed, which would be more than the provisions suggested in the "Madhya Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015". Estimated total compensation will be around Rs.66.72 Crores.
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xiv. Court case details:

Court Case no. and its present status	The Project Proponent reported that M/s SNS Minerals Limited has filed a writ petition having number 484 of 2017 in Madhya High Court at Jabalpur versus MP StateGovt. and Others claiming their rights for grant of mining lease over certain areas which includes 13.702 Ha in Khasra No. 1083, 1084, 1086, 1087 and 1088 of Bathiya village falling within LOI area of 266.302 Ha issued in favour of AAA resources Private Limited. The case is pending at the High Court of Madhya Pradesh at Jabalpur.
Undertaking by Project Proponent w.r.t court case	PP submitted an undertaking vide letter dated 14.09.2022 for abiding by the order of the Hon'ble High Court of Jabalpur in respect of Writ Petition no. 484/2017, it is further stated that "I, Dr.PrahaldKumar Choudhary, Authorized Signatory on behalf of M/s AAA Resources Private Limited undertake that M/s AAA Resources Private Limited is committed to abide by the order of the Hon'ble High Court and in case the Court verdict is not in favour of M/s AAA Resources Private Limited, it shall apply for necessary amendment in EC.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM	PP submitted the Affidavit in a non-judicial stamp
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dated 30.05.2018	paper of Rs 100 bearing XN 118806 that M/s AAA Resources Private Limited would comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Undertaking by Project Proponent in EIA/EMP report	The Project Proponent submitted an undertaking stating that the information and data provided in the EIA report and submitted to the Ministry are factually correct & Project Proponent is fully accountable for the same.
Undertaking by Consultant in EIA/EMP report	The Consultant submitted an undertaking vide letter dated 08.02.2023 stating that "M/s Pragathi Labs & Consultants Pvt Ltd have gone through the EIA&EMP report of AAA Resources Private Limited prepared by M/s Vimta Labs Ltd and observed that it has complied with all the prescribed Terms of Reference vide ToR letter dated 02.07.2021 and thus we hereby give our undertaking owning the contents and data provided in the report. Due to some uneventful situation M/s Vimta Labs Limited is unable to present the case, we are undertaking the responsibility of presenting the Final EC meeting before Expert Appraisal Committee, MoEF&CC".

xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Rs in Crores)	Recurring cost (Rs in Crores/ annum)
Air pollution control and management	2.280	0.904
Water and wastewater control and management	0.614	0.328
Noise and vibration control and management	0.110	0.010
Soil conservation and solid waste management	0.210	0.027
Plantation & Green Belt	2.722	1.960
Total	5.936	3.229

xvii. Details of project cost and employment:

Particulars	(Rs. in Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	7.161
Project Cost	255.72
Employment	132 persons

3. Observation and Recommendation of the Committee: -

During the EAC meeting, the Project Proponent informed the EAC that the EIA consultant has been changed from Vimta Labs Limited to Pragathi Labs & Consultants Pvt. Ltd since the Vimta Labs Limited has been debarred. The Project Proponent also informed the EAC that the Pragathi Labs & Consultants Pvt Ltd has

submitted an undertaking vide letter dated 08.02.2023 stating that they have gone through the EIA & EMP report of AAA Resources Private Limited prepared by M/s Vimta Labs Ltd and observed that it has complied with all the prescribed Terms of Reference vide ToR letter dated 02.07.2021 and thus they gave undertaking for owning the contents and data provided in the report.

The Project Proponent presented the KML file to indicate the site features in the study area. The Project Proponent informed the EAC that mine lease area comprises of three blocks such as Block-1, Block-8 and Block-10. It is proposed to start mining in Block 10 initially and then in Block 1 from 4th year. The Project Proponent also informed the EAC that Village Tamoriya is located adjacent to near Block 1 and Village Barahiya near Block 10. Drilling and blasting within 300 m from habitation will be done after taking permission from DGMS as per rules. Rock breaker will be deployed within ultimate pit limit where restriction for blasting will be imposed by DGMS. The EAC asked the Project Proponent to revisit the safety distance of 300m to be left for habitation in consultation with DGMS.

The Project Proponent also informed the EAC that no Forest land is involved in the mine lease area. No National Park, Wildlife Sanctuary, Elephant/Tiger Reserve, Eco-Sensitive Zone (ESZ) within 10 km radius of the mine lease area. No Schedule-I species in the study area. The EAC asked the Project Proponent to submit the action plan to monitor the movement of tigers in the vicinity of the mine lease area and also asked the Project Proponent to ensure the tiger corridors passing in the study area from Digital Support System (DSS) available in NTCA website.

Further, the Project Proponent informed that there is a canal, which intersects the mine lease area in Block 1 at two locations. A portion of proposed branch canal in Block-1 will require diversion after five years within the mine lease area for conservation of mineral. For this purpose, first the diverted portion of the canal will be constructed on the backfilled area and then the original canal will be connected to flow from the diverted portion. After that the dried portion of the original canal will be mined. The EAC asked whether the permission from Irrigation Dept has been obtained or not. The Project Proponent informed the EAC that the Irrigation Dept. has informed that the proposal for diversion of canal will be considered only after obtaining Environmental Clearance (EC). The Project Proponent committed that necessary permission will be obtained from the concerned Dept before diversion of the canal. NoC from CGWA is under process. The EAC asked the Project Proponent to submit the plan to avoid the shifting the proposal for diversion of canal.

The Project Proponent informed the EAC that an area of 258.230 ha will be purchased. There are 639 Project Affected Families (PAF's) and no displacement is involved. The EAC asked about the status of land acquisition. The Project Proponent informed that land acquisition is yet to start. The EAC opined that the Project Affected Families shall be given preference for the purpose of employment and shall

submit an action plan in such a way that atleast one person in PAF's shall get employment.

The EAC observed that the baseline data was carried out by old EIA Consultant. The EAC was of the view that the new EIA Consultant shall revalidate the baseline data for one month to ascertain the ground reality and validate the baseline data. The EAC also observed that the Project Proponent informed that M/s SNS Minerals Limited has filed a writ petition having number 484 of 2017 in Madhya High Court at Jabalpur versus MP State Govt and others claiming their rights for grant of mining lease over certain areas which includes 13.702 Ha in Khasra No. 1083, 1084, 1086, 1087 and 1088 of Bathiya village falling within LOI area of 266.302 Ha issued in favour of AAA resources Private Limited. The case is pending at the Hon'ble High Court of Madhya Pradesh at Jabalpur. The EAC asked the Project Proponent to submit the present status of the court case. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the action plan to monitor the movement of tigers in the vicinity of the mine lease area and the Project Proponent needs to ensure the tiger corridors passing in the study area from Digital Support System (DSS) available in NTCA website.
- ii. The Project Proponent needs to submit the plan to avoid the shifting the proposal for diversion of canal.
- iii. The Project Proponent needs to collect one-month fresh baseline data by new EIA consultant to ascertain the ground reality and for revalidation of earlier baseline data.
- iv. The Project Proponent needs to revisit the safety distance of 300m to be left for habitation in consultation with DGMS.
- v. The Project Proponent needs to submit the action plan for promotion of solar energy in the mine lease area and to the local people and also the action plan to reduce the diesel consumption by deploying CNG/Electric vehicles.
- vi. The Project Proponent needs to submit an action plan for the purpose of local employment in such a way that atleast one person in PAF's shall get employment.
- vii. The Project Proponent needs to submit the timeline for land acquisition for an area of 258.230 ha.
- viii. The Project Proponent needs to submit time line for installation of crusher plant of 1400 TPH.

- ix. The Project Proponent needs to carry out hydrogeology study and indicate location of garland drains, retaining walls and silt check dam.
- x. The Project Proponent needs to obtain permission from CGWA for drawing ground water.
- xi. The Project Proponent needs to submit the present status of the court case no: 484 of 2017 pending at Hon'ble High Court of Madhya Pradesh.

2.2 Damodarpur, Palkiri, Chatatand, Bhojudih, Narkera Sand Mining Project of M/s Tata Steel Limited for collection of river bed sand from the River Izri and Gowai with production capacity of 0.35 MTPA in the mine lease area of 50.17 Ha, located at Villages Damodarpur, Palkiri, Chatatand, Bhojudih, Narkera, Tehsil Chandankyari, District Bokaro, Jharkhand - [F. No.23-230/2018-IA.III (V), Proposal No: IA/JH/MIN/416206/2023, Consultant: Srushti Seva Pvt. Ltd.,] – Terms of Reference (Violation)

The instant proposal is for grant of Terms of Reference for Damodarpur, Palkiri, Chatatand, Bhojudih, Narkera Sand Mining Project of M/s Tata Steel Limited for collection of river bed sand from the River Izri and Gowai with production capacity of 0.35 MTPA in the mine lease area of 50.17 Ha, located at Villages Damodarpur, Palkiri, Chatatand, Bhojudih, Narkera, Tehsil Chandankyari, District Bokaro, Jharkhand.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude: 23°37'43.582"N to 23°38'13.108"N and Longitude: 86°24'51.537"E to 86°28'48.608"E. The mine lease area falls under the Survey of India Toposheet no: 73 I/6 and falls in Seismic zone- II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The mining lease area is located adjacent to the interstate boundary of Jharkhand and West Bengal. The Project Proponent submitted that the sand is used for stowing /backfilling the voids created after extraction of coal in the coal mines of Jharia division of Tata Steel Ltd. As per the MMDR Act, 1957 and Rule 70 of the MCR 1960, sand used for stowing purpose has been classified as a major mineral.
- iii. The Project Proponent submitted the proposal for Terms of Reference (ToR) vide online proposal no: IA/JH/MIN/73786/2018 dated 29.03.2018 under violation window of Ministry's Notification S.O 804 (E) dated 14.03.2017 since the Project Proponent carried out the mining without obtaining EC. Then, the proposal was considered in the EAC (Violation) meeting held during 28-29 August 2018 and the EAC after detailed deliberations deferred the proposal. Due to technical error in Parivesh, the Project Proponent submitted

a fresh proposal for grant of Terms of Reference (ToR) vide online proposal no: IA/JH/MIN/416206/2023 dated 03.02.2023. Accordingly, the proposal was considered in the 11th EAC (Non-Coal Mining) meeting held during 1-2 March, 2023 and based on Ministry's OM dated 27.09.2022.

Based on observation of EAC in its meeting held during 28-29 August 2018 compliance of observation of EAC made by Project Proponent are detailed below:

S. No	Observation of EAC	Reply by Project Proponent																																												
1	Letter from the State Department of Mines and Geology that validity of mines has been extended as per MMDR Act, 2015 for fifty years i.e. till 28 th November 2033.	The Project Proponent has submitted the letter from the Office of the District Mining Office, Bokaro vide Lr No: 2353/Mining, Bokaro dated 28.10.2021 that before execution of lease extension, PP needs to submit the Environment Clearance (EC).																																												
2	Submission of certified production details since inception by Director Mines and Geology of State Government.	<p>The Project Proponent has submitted the production details certified by the District Mining Officer, Bokaro vide dated 13.09.2017 from the year 1993-94 to 2012-13.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Production in Tonnes</th> <th>Year</th> <th>Production in Tonnes</th> </tr> </thead> <tbody> <tr> <td>1993-94</td> <td>2,65,756</td> <td>2003-04</td> <td>1,85,427</td> </tr> <tr> <td>1994-95</td> <td>2,15,654</td> <td>2004-05</td> <td>1,17,366</td> </tr> <tr> <td>1995-96</td> <td>80,793</td> <td>2005-06</td> <td>2,93,546</td> </tr> <tr> <td>1996-97</td> <td>80,954</td> <td>2006-07</td> <td>1,25,997</td> </tr> <tr> <td>1997-98</td> <td>-</td> <td>2007-08</td> <td>1,52,574</td> </tr> <tr> <td>1998-99</td> <td>995</td> <td>2008-09</td> <td>60,322</td> </tr> <tr> <td>1999-2000</td> <td>29,398</td> <td>2009-10</td> <td>9,530</td> </tr> <tr> <td>2000-01</td> <td>35,166</td> <td>2010-11</td> <td>60,194</td> </tr> <tr> <td>2001-02</td> <td>38,684</td> <td>2011-12</td> <td>46,315</td> </tr> <tr> <td>2002-03</td> <td>89,320</td> <td>2012-13</td> <td>4,417</td> </tr> </tbody> </table>	Year	Production in Tonnes	Year	Production in Tonnes	1993-94	2,65,756	2003-04	1,85,427	1994-95	2,15,654	2004-05	1,17,366	1995-96	80,793	2005-06	2,93,546	1996-97	80,954	2006-07	1,25,997	1997-98	-	2007-08	1,52,574	1998-99	995	2008-09	60,322	1999-2000	29,398	2009-10	9,530	2000-01	35,166	2010-11	60,194	2001-02	38,684	2011-12	46,315	2002-03	89,320	2012-13	4,417
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3	Submission of certificate to be obtained from Director Mines and Geology of State Government for PP has not carried out any mining activity beyond mining lease area.	The Project Proponent has submitted that the letter from the Office of the District Mining Office, Bokaro vide Lr. No: 4013 dated 06.08.2016 stating that the production work has been stopped since October, 2012. Further, PP submitted that there was an inspection from MoEF&CC Integrated Regional Office, Ranchi on 11 th August 2021 and the inspection report mentioned that mining is discontinued in mining lease.																																												
4	The Project Proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the	The Project Proponent submitted the notarized Affidavit dated 20.08.2022 stating that to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the																																												

	<p>2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. before grant of ToR/ EC. The undertaking <i>inter alia</i> include commitment of the PP not to repeat any such violation in future.</p>	<p>matter of Common Cause versus Union of India and Ors. M/s Tata Steel Limited shall always be committed to not to repeat any violation in future.</p>
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iv. Details of Mine Lease:

- a) The Project Proponent submitted that the sand mining lease was granted in favor of M/s Tata Steel Limited for a period of 20 years on 29.11.1983 for lifting of sand from the river bed for stowing purpose in coal mines located at Jharia Coalfield and its validity was up to Nov'2003. The renewal application was made on 12.11.2002.
- b) PP also submitted that as per MMDR Act, 2015 Sec 8(A)(5), Lease validity is for a period of fifty years i.e. till 28th November, 2033.

v. Land Use/Land Cover of the Mine Lease Area:

Private land	-
Government land	50.17Ha
Forestland	-
Total Mining lease area(MLA),ha	50.17Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Nil
Additional information (if any)	Lease area falls in Riverbed

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	13016/I/2014-PCA
	Date	03.05.2019
	Mineral & (Major/Minor)	Riverbed sand (Major)
	Mine Lease Area, Ha	50.17Ha
Additional information (if any)	Mining plan approved by Ministry of Coal	
Mining Parameters	Quantitative Description	
Method of Mining	Semi-mechanized opencast method	
Drilling/Blasting	None	
Geological Reserves	0.544 Million Tonnes	
Mineable Reserves	0.435 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	0.35 Million Tonnes river sand/annum. (Notopsoil/OB/other waste to be generated)	

Life of mine	15Years
Mine Bench Height & Bench Width	Max.2m height
No. of Mine Benches	1
Existing Depth, m bgl	At surface level
Ultimate Depth of Mining, m bgl	2m max.
Ground Water Table, m bgl	2m to11mbgl
Details of groundwater intersection	Mine workings will remain above GWT
Individual bench slope	45degree
Overall pit slope	45degree
Details of existing/proposed Crusher	None
Mineral Beneficiation	Not proposed
RoM output size	Sand
Transportation details including capacity of dumper/tipper, mode of transport and distance	Sand will be transported by 18T tippers upto coalmines of Tata Steel Ltd. In Jharia coal field located within 20km distance. 65Trips/day transport will be required.
Generation of Topsoil/OB & its Management during plan period & conceptual period	No generation of topsoil & OB.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	No mineral rejects/waste will be generated

vii. Water requirement:

Total water requirement	22.0KLD	Freshwater	2.0KLD
		Treated water	20.0 KLD
Source	Drinking water will be sourced from borewell/dugwell. Water for dust suppression will be sourced from pumped out water from nearby coal mines.		
Permission for withdrawal/intersection along with details of grant and its validity	Application will be submitted to CGWA to obtain permission.		

viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
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Village	Polkiri village	0.24km,S
Town	Sindri	6.5 km, NE
Highway	SH-218	1.84km,W
Interstate Boundary	Jharkhand- West Bengal	Adjacent(S)
Railway Station/ Railway line	Bhjudih Junction (Railway line crossing lease area)	1.14km,N
Water Bodies	Izri River, Gowai River Damodar River	0 km 0.1 km, N
Forest	Protected Forest	Adjacent(N)

ix. Presence of Environmentally Sensitive areas in the study area:

Forest Land/ Area/Environmental Zone	Protected Sensitivity	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
National Park		No	None within 10km radius
Wildlife Sanctuary		No	None within 10km radius
Elephant/Tiger Reserve		No	None within 10km radius
Eco-Sensitive Zone(ESZ)/Eco- Sensitive Area(ESA)		No	None within 10km radius
Coastal Regulation Zone(CRZ)		No	None within 10km radius
Schedule-I species (No.s and name of schedule-I species with authenticated letter)		No	None within 10km radius
Wildlife Conservation Plan		No	Not required

x. Green belt/plantation details:

Proposed area for green belt/plantation and no.of saplings proposed	Will be submitted in EIA/EMP report
Budget for green belt & plantation till the end of life of mine.	Will be submitted in EIA/EMP report
Budget for nursery	Nursery not proposed
Details of existing plantation and its survival rate	None
No.of tree cuts in the mine lease area and compensatory afforestation	None
Particulars for Greenbelt/plantation	Area covered (in Ha)
7.5m barrier & non-mineralized zone	9.70Ha
50msafetyzoneofnallah,roads,electriclines	None
500 m safety zones of nearest habitation villages	None

xi. Rehabilitation & Resettlement (R&R):

R&R details	The Project Proponent submitted that R&R is not applicable.
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xii. The Project Proponent has submitted initially the EIA/EMP report was submitted to MoEF in the year Jan'2010 for grant of Environmental Clearance

(EC). The Ministry vide letter dated 03.06.2011 informed the PP stating that the PP had continued to operate even after the date it fell due for renewal without obtaining requisite prior EC as required under the EIA Notification, 2006 thereby violating the provisions of the EP Act, 1986. JSPCB Regional Office, Dhanbad filed a case in CJM court, Bokaro on 20.10.2016 to take cognizance of the offence u/s 19 of Environment (Protection) Act, 1986.

xiii. Details of project cost and employment:

Particulars	(Rs.In Crore)
Project Cost	2.00
Employment(No.s)	72

3. Observation and Recommendation of the Committee: -

The EAC noted the instant proposal is for reconsideration of Terms of Reference under Ministry's Notification S.O 804(E) dated 14.03.2017 and as per Ministry's OM dated 27.09.2022. The Project Proponent informed the EAC that initially proposal for Terms of Reference (ToR) was submitted vide online proposal no: IA/JH/MIN/73786/2018 dated 29.03.2018 under violation window of Ministry's Notification S.O 804 (E) dated 14.03.2017 since the mining was carried out without obtaining EC. The Project Proponent also informed the EAC that the instant proposal was considered in the EAC (Violation) meeting held during 28-29 August 2018 and after detailed deliberations the EAC deferred the proposal for want of requisite information. Further, the Project Proponent informed the EAC that due to technical error in Parivesh, a fresh proposal for grant of Terms of Reference (ToR) has been submitted vide online proposal no: IA/JH/MIN/416206/2023 dated 03.02.2023 along with the information sought by the EAC.

The Project Proponent presented the KML file to indicate the site features in the study area. The Project Proponent informed the EAC that the mining lease area is located adjacent to the interstate boundary of Jharkhand and West Bengal. No forest land is involved in the mine lease area. No National Park, Wildlife Sanctuary within 10km radius of the study area. The Proponent also informed the EAC that the instant proposal is for stowing /backfilling the voids created after extraction of coal in the coal mines of Jharia division of Tata Steel Ltd. As per the MMDR Act, 1957 and Rule 70 of the MCR 1960, sand used for stowing purpose has been classified as a major mineral. The mine lease area is located in the tributary of Damodar river i.e., Izri and Gowai River. The EAC noted that these Izri and Gowai River joins the Damodar river and the junction of these rivers is located close to the mine lease area which is very sensitive. The EAC asked the Project Proponent to carry out a detailed study on terrestrial aquatic ecosystem and also highlighting the presence of river Dolphins. The EAC also opined that the Project Proponent needs to explore the possibility of utilizing for alternative of sand.

The Project Proponent informed the EAC that the Mining Plan was prepared in accordance with the Sustainable Sand Mining Management Guidelines 2016 and Enforcement and Monitoring Guidelines for Sand Mining, 2020 and the same was approved by Ministry of Coal. The EAC opined that irrespective of sand being a major/minor mineral, the District Survey Report is mandatory and the Project Proponent needs to submit the District Survey Report (DSR) as per Ministry's Notification S.O 3611(E) dated 25.07.2018.

The Project Proponent informed the EAC that the mining lease was extended by the Office of the District Mining Office, Bokaro vide letter dated 28.10.2021. The mine was operating without obtaining Environmental Clearance from the year 1993-94 to 2012-13. The Proponent has shown the details of production carried out during the above said period. The EAC asked about the status of the court case. The Project Proponent informed the EAC that the Jharkhand State Pollution Control Board, Regional Office, Dhanbad filed a court case in CJM court, Bokaro on 20.10.2016 to take cognizance of the offence u/s 19 of Environment (Protection) Act, 1986 and the matter is pending.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its 11th EAC (Non-Coal Mining) meeting held during 1-2 March, 2023 **recommended** the proposal under the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Terms of Reference (ToR) under Ministry's Notification S.O 804 (E) dated 14.03.2017 to M/s Tata Steel Limited for collection of river bed sand from the River Izri and Gowai with production capacity of 0.35 MTPA in the mine lease area of 50.17 Ha, located at Villages Damodarpur, Palkiri, Chatatand, Bhojudih, Narkera, Tehsil Chandankyari, District Bokaro, Jharkhand for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. The Jharkhand State Pollution Control Board, Regional Office, Dhanbad has filed a court case in CJM court, Bokaro on 20.10.2016 to take cognizance of the offence u/s 19 of Environment (Protection) Act, 1986. Further no consent to operate to be issued till the project is granted EC. Present status of above case by the State/State PCB, may be submitted to the Ministry.
- ii. The Project Proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

- iii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
- iv. The Dept. of Geology and Mining shall take necessary action in compliance of the Hon'ble Supreme Court judgment dated 02.08.2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
- v. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- vi. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
- vii. Details of benefit accrued during the violation period along with capital cost of the project are to be submitted.
- viii. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
- ix. One season fresh baseline data has to be collected and incorporated in the EIA/EMP report. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, predominant downwind direction and at other sensitive receptors.
- x. The Project Proponent needs to explore the possibility of utilizing for alternative of sand.
- xi. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- xii. The Project Proponent needs to carry out a detailed study on terrestrial aquatic ecosystem and also highlighting the presence of river Dolphins.

- xiii. The Project Proponent needs to carry out detail study to ensure no adverse effect on aquatic habitats and micro organisms due to movement of heavy equipment on the river bed.
- xiv. The Project Proponent needs to study the traffic density and carrying capacity of the road and should include the same in the EIA/EMP report. PP needs to submit the map showing the transport route and its impact due to mining activity and the mitigation measures to be taken.
- xv. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xvi. The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- xvii. The Project Proponent needs to submit the District Survey Report (DSR) as per Ministry's Notification S.O 3611(E) dated 25.07.2018.
- xviii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

2.3 Amendment in EC w.r.t specific condition (i) of EC letter dated 31.08.2020 granted to M/s Jaykaycem Central Limited for Kakra- Panna Limestone Mine in the mine lease area of 1594.34 ha, located at villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in AmanganjTahsil, District Panna, Madhya Pradesh - [F.No: J-11015/190/2016-IA.II(M), Proposal No: IA/MP/MIN/58058/2016] - Amendment in EC

The instant proposal is for amendment in EC w.r.t specific condition (i) of EC letter dated 31.08.2020 granted to M/s Jaykaycem Central Limited for Kakra- Panna Limestone Mine in the mine lease area of 1594.34 ha, located at villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tahsil, District Panna, Madhya Pradesh.

2. Observation and Recommendation of the Committee:

The EAC noted that the Project Proponent vide email dated 01.03.2023 informed that due to few changes in proposal, it is hereby decided by PP to withdraw the instant proposal submitted for grant of amendment in Environmental Clearance and a fresh proposal will be submitted later on. Therefore, the EAC **returned the**

proposal in present form based on the request of the Project Proponent vide email dated 01.03.2023.

2.4 Granite Building Stone Quarry of M/s Morayoor Granites Private Limited with production capacity of 157669 MT/annum over an area of 4.9797 Ha located at ReSurvey No.152/1-1, 152/1, 159/1-1, 159/1-2, 159/1-3, 160/1-1, 160/1-2, 160/1-3, 160/1-4, Re Survey Block No. 56 of Morayur Village, Kondotty Taluk, Malappuram District, Kerala - [File No: IA-J-11015/82/2021- IAI(NCM), Proposal No: IA/KL/MIN/232178/2021, Consultant: SBA Enviro Systems Pvt. Ltd.] - Reconsideration of Environmental Clearance

The instant proposal is for reconsideration of Environmental Clearance for M/s Morayoor Granites Private Limited for mining of Granite Building Stone with production capacity of 157669 MT/annum over an area of 4.9797 Ha located at ReSurvey No.152/1-1, 152/1, 159/1-1, 159/1-2, 159/1-3, 160/1-1, 160/1-2, 160/1-3, 160/1-4, Re Survey Block No. 56 of Morayur Village, Kondotty Taluk, Malappuram District, Kerala.

2. The details of the project as ascertained from the documents submitted by the Project Proponent and as revealed from the discussions held during the meeting are given as under:

- i. The mine lease area is located between Latitude 11°06'25.44"N to 11°06'40.96"N and Longitude 76°0'36.26"E to 76°0'43.68"E. The mine lease area falls under the Survey of India Toposheet No: C43D16-C43E4 and falls in Seismic Zone III.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals.
- iii. The proposal was initially considered in the 41stEAC (Non-Coal Mining) Meeting held during 15th- 16thNovember and 18thNovember, 2021 wherein the Committee deferred the proposal for want of District Survey Report (DSR). The Project Proponent submitted the reply on 20.12.2021 along with the Certificate of the District Office of Mining & Geology vide dated 15.12.2021 stating that the Department of Mining and Geology has prepared the District Survey Report (DSR) during the year 2016 in accordance with the guidelines issued by the Ministry's Notification S.O 141 (E) dated 15.01.2016. Since it satisfied the requirements under the Ministry's Notification S.O 3977 (E) dated 14.08.2018 also, this DSR has been accepted and adopted for the proceedings of the State Level Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) of Kerala in connection with application seeking Environmental Clearance for mining projects including cluster situations. The DSR published by the Department of Mining and Geology, Govt. of Kerala during the year 2016 is the one which exists at present. The Department has not revised the DSR since then. The District Survey Report, 2016 is the relevant complied and effective document being followed and accepted by the State of Kerala as on date. No change has been brought into District Survey Report, 2016 by the Department of

Mining and Geology, thereafter. This certificate is issued to produce before the Expert Appraisal Committee of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India. In the view of above certificate, PP requested to consider the proposal for grant of Environmental Clearance. Then, the proposal was again considered in the 44th EAC meeting held during 28th to 29th December, 2021 wherein the Member Secretary informed the Committee that the project proponent during the presentation had requested to delist the proposal telephonically on 29.12.2021. Therefore, the Committee deferred the proposal. The proposal was delisted on 06.04.2022 in Parivesh and the Project Proponent again relisted the proposal on 06.10.2022.

- iv. The instant proposal was considered in the 6thEAC (Non-Coal Mining) meeting held during 9-11, November, 2022 as per Ministry's OM dated 27.09.2022 wherein it is mentioned that "the proposals which have been considered/ appraised once by EAC either for TOR or EC, but final decision has not been taken, shall continue to be appraised at the Central level only, till final disposal for ToR/EC, even after the amendments in the EIA Notification are issued from to time regarding delegation of projects to SEIAAs". After detailed deliberations made by the Project Proponent and the Consultant, the EAC deferred the proposal for want of requisite information. The Project Proponent submitted the information on 05.01.2023 in Parivesh and accordingly the proposal was again reconsidered in the 9th EAC (Non-Coal Mining) held during 17 - 18 January, 2023. During the EAC meeting, the EAC waited for the Project Proponent to join the EAC meeting. The Project Proponent did not turn up to attend the EAC meeting. The EAC was of the view that since the instant proposal is for Environmental Clearance, the presence of project proponent is required. Therefore, the EAC deferred the proposal. Then, the Project Proponent vide letter dated 06.02.2023 apologized to this Ministry and requested to consider the proposal in the next EAC (Non-Coal Mining) meeting and assured that they will be on time in the next meeting. Accordingly, the proposal was reconsidered in the 11th EAC (Non-Coal Mining) meeting held during 1-2 March, 2023.

Based on observation of EAC in its 6thEAC (Non-Coal Mining) meeting held during 9-11, November, 2022 compliance of observation of EAC made by Project Proponent, are detailed below:

S. No	Observation of EAC	Reply by Project Proponent
1	The EAC noted that the production by jack hammer drilling is not sufficient to produce 650 TPD. The EAC asked the Project Proponent to revisit the methodology of	The Project Proponent submitted that the instant mine is proposed to work with conventional open cast method with bench system and mode of operation will be semi-mechanized. Mining will be done with the help of machineries like rock drills, jack

	<p>the mining adopted specifically relating to Bench height, Drilling and Blasting and accordingly the project proponent needs to submit the comprehensive note on methodology of mining with proper justification. Accordingly, the mining plan needs to be revised.</p>	<p>hammer, compressors, hydraulic excavators, breakers etc., Loading of the building stone blocks will be done mechanically to tippers of 10MT capacity and transported from the quarry to the stockyard and mineral rejection/waste will also be handled mechanically. In the quarry the road will be maintained with 1 in 16 gradients. Sufficient number of bunds and parapet walls will be made all along the quarry haulage roads wherever necessary in order to maintain safe working conditions by using the waste generated during the course of quarry operations.</p> <p>Based on the mode and method adopted and taking geological parameters of the ore body into consideration, the quarry is designed in such a way that conceptually the height of the bench will be kept about 5m max and maintaining a maximum slope of 45° from the horizontal plane. In the initial stage of mining, the work will be carried out from 250m MSL-255m MSL. In this bench, width of the bench will be 12m which will be sufficient for the machinery operations. After completing the working operations in the first bench, the width of the bench will be reduced to 5m, while works start at immediate below bench (245-250m MSL). Similarly, in the further stages of mining, the width available for the safe mining operations at 245m MSL, 240m MSL and 235m MSL will be 15.6m,19.3m and 22.9m respectively. The same mining process is carried throughout the mining operation thereby sufficient working space will be available during the operational phase which will reduce the risk of accidents. To maintain the bench height of 5m, sub-bench of 2.5m will be formed first and later on two benches of 2.5m will be merged and one bench of 5m will be formed and maintained. The same approach was</p>
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		<p>considered in the Mining Plan approved by District Geologist.</p> <p>Further, PP submitted that the production of Granite Building Stone in compact zone is obtained by Drilling and Blasting. Drilling will be done by Jack Hammer with the help of air compressor. About 3 No's of Jack hammers will be used in the respective site. It is capable of drilling 32mm diameter holes upto a depth of 2.6m. About 50no's of holes can be drilled using one jack hammer of above mentioned capacity. So, totally 150no's of holes can be drilled using 3 No's of Jack hammers.</p> <p>The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS. Multiple blast holes of 2.6m depth will be drilled with 32mm drill rod, Jack Hammer and Air Compressors of 100 cfm Capacity. It is estimated that about 375g of explosives per hole will be required. About 48 holes per blast are proposed. Therefore, about 96no's of holes required for 1day blast. So, 36kg of explosives will be required for 96 holes per day. The targeted average annual production of Stone is 157669.4 MT/Annum. Blasting will be done 2 times in a day. About 96 no's of holes will be required for one day blasting for the granite stone production in the respective site. So, 3 no's of Jack hammers were sufficient to make 96 holes in a day.</p>
2	<p>The EAC opined that the proposed transportation is passing through the village road and hence asked the Project Proponent to conduct the traffic study as the PP is proposing to transport 140-150 no. of</p>	<p>The Project Proponent submitted that the approach road from the quarry site is accessible via Arimbra-Morayur road, village road which is connected to NH966. The proposed route is passing through a populated area. Hence, the alternative route was considered for the traffic study in which the regular truck movement is there with</p>

	<p>trips/day and also the measures and action plan to be taken to strengthen and maintenance of the approach road. PP should explore the possibility of bypassing the village road for transportation purpose and accordingly submit the map for transportation route.</p>	<p>sufficient capacity. The approach road connects the proposed project site with Malayil Road and then it reaches the Poolapees Junction where connected to Vengara Road-PoolapeesJn-Neduyirippu Road, connects NH 966. Both stretches have a minimum width of 7m which is sufficient to cater the additional traffic loads from the proposed project.</p> <p>The vehicular traffic density survey was carried out on 06.12.2022 and 07.12.2022 on 7m wide for 12 hours on Malayil Road - Poolapees Junction (Distance: 4.03km) and Vengara Road-Poolapees Junction – Neduyirippu Road (Distance 13.4 km) respectively. The vehicles plying on road in both the directions were counted continuously for 12 hours. The vehicles were counted every hour and stipulated by Indian Road Congress (IRC).</p> <p>Further, the Project Proponent submitted that traffic data was collected continuously for 12 hours by visual observation and counting of vehicles under five categories, viz., car, two wheelers, three wheelers, buses and trucks. Total numbers of vehicles per hour under these categories were determined for both stations in Passenger Car Unit (PCU). From the traffic study, the current traffic volume in the Malayil Road -Poolapees Junction is 155.8PCU per hour and in the Vengara-Poolapees Junction - Neduyirippu Road is 305.9PCU per hour. The total number of trucks for transport of the building stone will be 63 trips/day (max) for the proposed quarry. The traffic volume may increase by 48 PCU/hour for roads. The impact will be negligible. The Level of Service is excellent for Malayil-Poolapees Junction and Very Good for VengaraPoolapees Junction-Neduyirippu Road. The road is safe for the</p>
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		<p>further traffic. The transportation route has the capacity to manage the additional traffic from the proposed quarry and it will not affect to the existing traffic in the road. The traffic flow in these stretches of the road remains smooth and stable for most of the time.</p>
3	<p>The Project Proponent needs to refer the Central Pollution Control Board (CPCB) Guidelines for developing greenbelts and to rework on the spacing proposed for development of greenbelt and also to provide the no. of trees cut in the mine lease area and the compensatory afforestation plan, along with the no. of species to be planted and the type of species to be planted.</p>	<p>The Project Proponent submitted that about 0.6195 Ha of area falls under the Green Belt. 295 no.s of trees are currently existing in the buffer area and additionally 737 no.s of trees will be planted within the buffer area with an expecting survival rate of 90-95% with a plant interval of 2x3m wide.</p> <p>PP also submitted that as a compensation of loss of trees within the core area, plantation will be carried out side the lease area, more in the dry area in Survey No 160/1-2 over an area of 0.6516Ha. Yearly, it is proposed to plant about 217no.s of trees for 5years. Totally around 1085no.s of trees will be planted within the same area, expecting survival rate of 90-95% with a plant interval of 2x3m wide.</p> <p>Further, PP submitted that the reclamation will start within the first year execution of mine quarrying, the benches will be reclaimed with planation. At the end of life of quarry, about 2.0815ha will be reclaimed with quarry waste and totally 3469numbers of trees will be planted with in the quarry area (earlier benches) with plant interval of 2x3m wide. And expecting survivalrate of 90-95%. PP also submitted the list of species proposed to plant tolerant to Air Pollution, Dust Collector and to control Noise Level and also the list of species recommended for afforestation after mine closure.</p>
4	<p>The Project Proponent needs to revise the activity for promotion of education, health care and provision of</p>	<p>The Project Proponent submitted that the CER activities will be implemented in the local community around the project site. In continuation to the recent OM No.22-</p>

	<p>solar lights in a more specific and in a monitorable and actionable manner along with the timeline for the completion of the said activities.</p>	<p>65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF&CC, the concerns with respect to CER activities to be taken up and the budget for the same is allocated as Rs.8,00,000 allocated as Non-Recurring expenses and Rs.3,00,000 allocated as Recurring expenses. The Project Proponent earmarked a budget of Rs 2.0 Lakhs towards installation of 2 kW Solar unit for the Govt. H.S School, Arimbra, Rs 3.0 Lakhs towards financial support for 30Patients and Rs 3.0 Lakhs towards provision of 60 no's of 15W Solar LED Street lights in cooperation with Panchayat and KSEB. The CER activities will be undertaken during the first three years of validity period of the EC and the maintenance of the interventions will be undertaken during the remaining period of validity of the EC.</p>																																											
<p>5</p>	<p>The Project Proponent to revise the activity and the cost of Environmental Management Plan (EMP).</p>	<p>The Project Proponent submitted that the budget of the EMP of the Non-Recurring Cost revised from Rs 37.75 Lakhs to 47.96 Lakhs andRecurring Cost revised from Rs15.165 Lakhs to Rs 25.11 Lakhs and the breakup of the same are given as under:</p> <table border="1" data-bbox="756 1294 1409 2038"> <thead> <tr> <th>S. No</th> <th>Area of Intervention</th> <th>Non-Recurring Cost</th> <th>Recurring Cost</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">Air Pollution</td> </tr> <tr> <td rowspan="4">1</td> <td>Personal protective equipment to mineworkers</td> <td style="text-align: center;">-</td> <td style="text-align: right;">1,00,000</td> </tr> <tr> <td>Blast mats</td> <td style="text-align: right;">2,00,000</td> <td style="text-align: right;">1,00,000</td> </tr> <tr> <td>Wetting of roads(paved and unpaved) by water tanker</td> <td style="text-align: right;">7,00,000</td> <td style="text-align: right;">3,00,000</td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right;">12,00,000</td> <td style="text-align: right;">6,00,000</td> </tr> <tr> <td colspan="4" style="text-align: center;">Noise & Vibration Pollution</td> </tr> <tr> <td rowspan="2">2</td> <td>Blasting siren &Notice Boards</td> <td style="text-align: right;">85,000</td> <td style="text-align: right;">1,00,000</td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right;">85,000</td> <td style="text-align: right;">1,00,000</td> </tr> <tr> <td colspan="4" style="text-align: center;">Water Pollution</td> </tr> <tr> <td rowspan="2">3</td> <td>Construction of Desiltation Tank and Check dam (storm water management)</td> <td style="text-align: right;">9,00,000</td> <td style="text-align: right;">1,50,000</td> </tr> <tr> <td>Construction of Ponds (Rain water harvesting)</td> <td style="text-align: right;">4,00,000</td> <td style="text-align: right;">1,00,000</td> </tr> </tbody> </table>	S. No	Area of Intervention	Non-Recurring Cost	Recurring Cost	Air Pollution				1	Personal protective equipment to mineworkers	-	1,00,000	Blast mats	2,00,000	1,00,000	Wetting of roads(paved and unpaved) by water tanker	7,00,000	3,00,000	Subtotal	12,00,000	6,00,000	Noise & Vibration Pollution				2	Blasting siren &Notice Boards	85,000	1,00,000	Subtotal	85,000	1,00,000	Water Pollution				3	Construction of Desiltation Tank and Check dam (storm water management)	9,00,000	1,50,000	Construction of Ponds (Rain water harvesting)	4,00,000	1,00,000
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		Seasonal Cleaning of Garland drain & Desiltation tanks	-	2,00,000
		Sub Total	13,00,000	4,50,000
		Ecological Environment		
		Green Area development in 7.5m buffer zone of mine lease area	3,68,500	3,68,500
		Afforestation Plan nearer to lease area	5,42,500	5,42,500
	4	Social Forest tree	2,50,000	2,50,000
		Subtotal	11,61,000	11,61,000
		Solid Waste Management		
	5	Topsoil & Overburden Dumping Area yard development	10,00,000	1,00,000
		Waste Oil Management	50,000	1,00,000
		Sub Total	10,50,000	2,00,000
		GrandTotal	47,96,000	25,11,000
6	The Project Proponent needs to submit the arrangements made inside the mine lease area for washing vehicles.	The Project Proponent has submitted that the arrangements made for washing vehicles in the lease area is incorporated in Environmental Management Plan. High pressure washers will be used for vehicles cleaning. It has the ability to supply a high volume of pressurised water and to remove dirt, stuck on debris and other contaminants quickly and efficiently. A specific free space in the quarry site will be arranged for cleaning of vehicles and machineries to wash it weekly. About 2 no's of rock breaker, 3 no's of jack hammer and 5 no's of Tippers/trucks were used in the respective site. The water required for cleaning of machineries and vehicles will be 15.0 KLD.		
7	The Project Proponent needs to submit the Letter of Intent (LoI) renewed by the Dept. of Mining & Geology vide letter dated 16.09.2022 in Parivesh.	The Project Proponent submitted the extension of Letter of Intent (LoI) issued by the Directorate of Geology and Mining, Kesavadasapuram, vide Lr No. DMG/802/2022-M4 dated 16.09.2022 stating that the Letter of Intent issued as per Letter of Intent No: 4072/M3/2019 dated 30.05.2019 is extended until further orders subject to the same conditions specified therein and also subject to the decision on 200m distance criteria from the Hon'ble		

		National Green Tribunal in OA 304/2019.
8	<p>The Project Proponent needs to submit the District Survey Report (DSR) as per Ministry's Notification S.O.3611(E) dated 25.07.2018 and in accordance with the Ministry's Notification dated 25.07.2018 and order of Hon'ble Supreme Court dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 titled as State of Bihar V/s Pawan Kumar.</p>	<p>The Project Proponent submitted the Certificate issued from the Office of District Mining & Geology vide letter dated 15.12.2021 stating that the Department of Mining and Geology has prepared the District Survey Report (DSR) during the year 2016 in accordance with the guidelines issued by the Ministry's Notification S.O 141 (E) dated 15.01.2016. Since it satisfied the requirements under the Ministry's Notification S.O 3977 (E) dated 14.08.2018 also, this DSR has been accepted and adopted for the proceedings of the State Level Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) of Kerala in connection with application seeking Environmental Clearance for mining projects including cluster situations. The DSR published by the Department of Mining and Geology, Govt. of Kerala during the year 2016 is the one which exists at present. The Department has not revised the DSR since then. The District Survey Report, 2016 is the relevant complied and effective document being followed and accepted by the State of Kerala as on date. No change has been brought into District Survey Report, 2016 by the Department of Mining and Geology, thereafter. This certificate is issued to produce before the Expert Appraisal Committee of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Govt. of India.</p> <p>Further, PP submitted the copy of the order dated 08.03.2022 of the Hon'ble High Court of Kerala in the W.P (C) No: 6510 of 2022 in the matter of UmmerKutty.K versus UoI and Ors and the order reiterates that "the applications have been uploaded and are pending before the 2nd respondent (The Expert Appraisal Committee, Ministry Of</p>

		<p>Environment and Climate Change),there will be a direction to the 2ndrespondent to take up the applications submitted by the petitioners for Environmental Clearance on the basis of the DSR 2016. Appropriate steps shall be taken, in accordance with law”.</p>
<p>9</p>	<p>The Project Proponent should submit definite time line for construction of garland drain, retaining wall and settling pond.</p>	<p>The Project Proponent submitted that proper drainage management plan has been designed to prevent the contamination of public drainage and water bodies. It is proposed to construct a garland drainage at the start of mining operation. In the initial phase, garland drainage with silt traps will be constructed along the boundary pillars BP8-BP10-BP11-BP12. While mine progressing stage, garland drain will be constructed along the boundary pillars BP8-BP7-BP6-BP4 within 1year. In the 2ndyear, garland drainage with silt traps constructed in the northern stretch of the lease area i.e, along the boundary pillars BP2-BP1.Garland Drains will be constructed in the lower slope of mine lease area having dimensions of 1m width around the working benches.</p> <p>PP also submitted that the surface runoff water from the quarry area carries by Garland Drains and flows through silt traps at each slope breaks. Collected run-off from the lease area passes through Desiltation tanks. Two Desiltation tanks will be proposed in the quarry area. One Desiltation tank will be proposed nearer to the boundary pillars BP6 having dimensions of 3mx1.5mx2.5m and another one proposed nearer to boundary pillar BP2 of lease area having dimensions of 3mx1.5mx2.5m. Within 1 year it is proposed to construct the Desiltation tanks.Clarified and controlled water flow passes through check dam.From the check dam, the controlled flow only connects to the existing natural drainage.</p>

		<p>Further, the Project Proponent submitted that the Top soil and Over Burden will be stored in the lowest part of the mining area i.e, in the North Side which will be protected with retaining walls made of RCC having dimensions of 2.5m height and 1m width. The retaining wall will have weep holes to drain out water to the garland drain. The stability of overburden will be maintained by providing proper seeding. For more stability deeper rooted trees and shrubs will be planted to protect it. Precautions will be taken to limit the height of the dump to 5 to 6 m in order to preserve its fertility and shelf life. The retaining wall will be constructed within the first year of the mining period.</p>
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- v. The Project Proponent submitted that the Letter of Intent (LoI) issued by the Geologist, Dept. of Mining & Geology, vide letter no. 4072/M3/2019 dated 30.05.2019. The Project Proponent submitted that since the clearances couldn't be able to obtain within the stipulated time, LoI has been renewed by Dept. of Mining & Geology vide letter dated 16.09.2022. The total mine lease area of 4.9797 Ha is a Private land.
- vi. The Project Proponent submitted that the Mining Plan including Progressive Mine Closure Plan was approved by the Dept. of Mining & Geology, Malappuram vide letter dated 12.07.2021 over an area of 4.9797 Ha in respect of Granite Stone quarry. The method of mining will be opencast semi-mechanized method. The total mineable reserve is 1576694 MT. The life of the quarry is 10 years. The proposed bench height and width will be 5m respectively. Loading of the building stone blocks will be done mechanically to tippers of 10 MT capacity and transported from the quarry to the stockyard and mineral rejection/waste will also be handled mechanically. The topsoil is estimated about 20,701 cu.m. The same will be stacked separately and it will be used for plantation purpose. About 24,841.2 cu.m waste will be generating during the life of the quarry. This will be stacked in the site for maintenance of internal & external roads and also for other civil construction works, as and when required. If the entire material is not used for maintenance, then the remaining material will be used for backfilling to the mined-out pit. The ground water level measured from the nearest well is about 10-15 m below the ground level, which is at 95 m MSL. The ultimate depth of the working of the quarry is 190 m MSL. Since the working is above the general ground water table, it does not affect the ground water.

- vii. The total water requirement for the proposed mining activity is 6 KLD, out of which 1.0 KLD is for Domestic uses, 3.0 KLD for Dust suppression and 2.0 KLD for plantation purposes and the water will be sourced from tanker water supply on contract basis.

viii. Nearest village / town/ highway/railway station / water bodies

Particulars	Particular's Name	Distance & Direction
Nearest human habitation	210.3 m	
Town/Village	Arimbra	0.5 km, East
Highway	NH 966 (Kozhikode)	2 km, North
Railway Station	Vallikunnu Railway Station	17.5 km, West
Water bodies	Chamakayam Dam, Panakkad Cholakkad Mini Dam Kadalundy (Karathode)	7.76 km, South 9.81 km, East 5.8 km, South

- ix. The Project Proponent reported that there is no forest land involved in the mine lease area. PP also reported that there is no National Park, Wildlife Sanctuary, Eco Sensitive Zone, Critically Polluted Area, Archaeological Features within 10 km radius of the study area. The Project Proponent submitted the Certificate issued by the District Office, Mining & Geology Department, Malappuram vide No.DOM/M-4211/2018 dated 24.08.2021 stating that there is no Granite Building Stone quarry in operation within 500m radius of the proposed Granite Building Stone quarry of M/s Morayoor Granites Pvt. Ltd.
- x. The Project Proponent submitted that the baseline data was collected from 29.04.2019 to 30.04.2019. PP submitted that ambient air quality monitoring was conducted on 29.04.2019 at four locations. PP reported that PM10 concentration ranged from 49.5-51.2 $\mu\text{g}/\text{m}^3$, PM2.5 ranged from 18.4-21.0 $\mu\text{g}/\text{m}^3$, SO₂ ranged from 2.6-6.8 $\mu\text{g}/\text{m}^3$ and NO₂ ranged from 2.9-6.1 $\mu\text{g}/\text{m}^3$. The ambient air quality at site found to be within the prescribed standards (NAAQS). The water sample was collected on 29.04.2019. PP reported that the pH value found to be 7.05, TDS: 92 mg/l, Chloride: 31.0 mg/l, Calcium: 8.91 mg/l, Magnesium: 1.96 mg/l and E-coli: Absent. The noise values were monitored at four locations. The day time noise level varied from 44.1 - 47.5 dB (A) and night time noise level varied from 33.5 – 36.9 dB (A).
- xi. The Project Proponent submitted that the proposed area for greenbelt/ plantation is 0.6195 ha. PP earmarked a budget of Rs 2.0 Lakhs as Capital cost towards development of green plant & plantation till the end of life of mine.
- xii. The Project Proponent submitted that as there are no habitations or hutments in the core zone area, no rehabilitation or resettlement problems are involved.
- xiii. The Project Proponent submitted that there is no court case pending against the project and/or land in which the project is proposed to be set up.
- xiv. Details of the EMP:

S. No	Area of Intervention	Non-Recurring Cost	Recurring Cost
	Air Pollution		
1	Personal protective equipment to mine workers	-	1,00,000
	Blast mats	2,00,000	1,00,000
	Wetting of roads (paved and unpaved) by water tanker	7,00,000	3,00,000
	Sub total	12,00,000	6,00,000
	Noise & Vibration Pollution		
2	Blasting siren & Notice Boards	85,000	1,00,000
	Subtotal	85,000	1,00,000
	Water Pollution		
3	Construction of Desiltation Tank and Check dam (storm water management)	9,00,000	1,50,000
	Construction of Ponds (Rain water harvesting)	4,00,000	1,00,000
	Seasonal Cleaning of Garland drain & Desiltation tanks	-	2,00,000
	Sub Total	13,00,000	4,50,000
	Ecological Environment		
4	Green Area development in 7.5m buffer zone of mine lease area	3,68,500	3,68,500
	Afforestation Plan nearer to lease area	5,42,500	5,42,500
	Social Forest tree	2,50,000	2,50,000
	Subtotal	11,61,000	11,61,000
	Solid Waste Management		
5	Topsoil & Overburden Dumping Area yard development	10,00,000	1,00,000
	Waste Oil Management	50,000	1,00,000
	Sub Total	10,50,000	2,00,000
	Grand Total	47,96,000	25,11,000

xv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Capital Cost for Environment Protection	0.4796
Budget for addressing the Public Hearing issues	NA
Recurring Cost for EMP	0.2511
Project Cost	3.50
Employment	11 persons

3. Observation and Recommendation of the Committee:

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent informed the EAC that there will be two blast per day and in total 96 no. of blast holes will be drilled per day. The

Project Proponent also informed the EAC that alternative route for transportation of mineral has been selected from Mine lease area via Malayil Road -Poolapees Junction which is connected to Vengara Road-Poolapees Jn-Neduyirippu Road, connecting NH 966. The Level of Service is excellent for Malayil-Poolapees Junction and Very Good for Vengara Poolapees Junction-Neduyirippu Road. The EAC asked the Project Proponent whether there is any movement of elephants in the vicinity of the mine lease area. The Project Proponent informed the EAC that there is no movement of elephants observed in the vicinity of the mine lease area.

The Project Proponent informed the EAC that as a compensation of loss of trees within the core zone, plantation will be carried out side the lease area over an area of 0.6516 Ha with 217 no's of trees with a timeline of 5 years. The EAC noted that the nearest human habitation is 210.3 m. The EAC asked about the status of the matter in Hon'ble National Green Tribunal regarding distance of 200m criteria. The Project Proponent informed the EAC that the as per direction of the Hon'ble National Green Tribunal, joint committee has submitted their report to the Hon'ble NGT and the instant matter is not applicable to this mine lease area.

The EAC noted the order of the Hon'ble High Court of Kerala dated 08.03.2022 in the W.P (C) No: 6510 of 2022 in the matter of UmmerKutty.K versus Uol and Ors and the order reiterates that *"the applications have been uploaded and are pending before the 2nd respondent (The Expert Appraisal Committee, Ministry Of Environment and Climate Change), there will be a direction to the 2nd respondent to take up the applications submitted by the petitioners for Environmental Clearance on the basis of the DSR 2016. Appropriate steps shall be taken, in accordance with law"*. The EAC was of the view that as on date, District Survey Report (DSR) is to be as per Ministry's Notification S.O.3611(E) dated 25.07.2018 and in accordance with the Ministry's Notification dated 25.07.2018 and order of Hon'ble Supreme Court dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 titled as State of Bihar v/s Pawan Kumar. The EAC opined that the Ministry may seek a legal opinion on this instant matter.

After detailed deliberations, the EAC observed that the mine lease area is located in the vicinity of the ecologically sensitive and fragile area. The EAC felt that the Granite Building Stone of small mine leases will lead to ecological damage of the area. Thus, the EAC opined that it is necessary to ascertain the ground reality on the proposed methodology of mining, habitation, afforestation and transportation. The EAC was of the view that a site visit needs to be conducted by a sub committee comprising of EAC Members and officers from MoEF&CC. The EAC advised the Ministry to constitute a sub-committee for site visit. Therefore, the EAC **deferred** the proposal and was of the view that the proposal may be considered only after the submission of the site visit report by sub-committee.

ADDITIONAL AGENDA:

2.5 Report of the field visit undertaken by EAC subcommittee during 18-21 February 2023 at Mahulsukha Iron and Manganese Ore Block of M/s Patnaik Minerals Private Ltd for mining of Iron and Manganese Ore in the mine lease area of 390.317 ha (as per DGPS)/399.838 ha (as per ROR), with proposed production capacity of Iron Ore: 1.0MTPA (ROM) and Manganese Ore: 0.15MTPA (ROM), located at Villages Randa, Rantha and Bhutuda under Bonai Sub-Division and Lahunipada Tehsil, Sundargarh District, Odisha

The instant proposal is for mining of Iron and Manganese in Mahulsukha Iron and Manganese Ore Block of M/s Patnaik Minerals Private Ltd with proposed production capacity of Iron Ore: Total Excavation: 1.662977 MTPA; ROM: 1.0 MTPA and Manganese Ore: Total Excavation: 1.407519 MTPA; ROM: 0.15 MTPA, in the mine lease area of 390.317 ha (as per DGPS)/399.838 ha (as per ROR), located at Villages Randa, Rantha and Bhutuda under Bonai Sub-Division and Lahunipada Tehsil, Sundargarh District, Odisha. The mine lease area is located between Latitude: 21°46'52.12" to 21°49'04.55"N and Longitude: 85°07'55.43" to 85°09'10.42"E. The mine lease area falls under the Survey of India Toposheet No: 73/G1 and falls in Seismic Zone-III.

2. The instant mine is an auction mine vested to M/s Patnaik Minerals Pvt. Limited from M/s Aryan Mining & Trading Corporation Ltd. The Govt. of Odisha vide Lr No.4246/IV(B)SM-23/2020/SM dated 30.05.2020 issued vesting order stating that *the without prejudice to the generality of the provisions of section 8B(2) of the MMDR Act, 1957, the details of the valid rights, approvals, clearances, licenses, and the like held by the previous lessee are vested in favour of M/s Patnaik Minerals Pvt. Ltd. and the vesting order is valid for a period of two years from the date of execution of lease deed or till the date of getting fresh approvals, clearances, licenses, permits, and the like, whichever is earlier.* Then, the Govt. of Odisha vide Order No. 5518/IV(B)SM-23/2020/SM dated 29.06.2020 granted mining lease for Iron & Manganese ore in favour of M/s Patnaik Minerals Pvt. Ltd in respect of Mahulsukha Iron and Manganese Ore block over an area of 390.317 ha (as per DGPS)/399.838ha (as per ROR) for a period of 50 years and accordingly mining lease deed was executed on 29.06.2020.

3. The Project Proponent obtained Terms of Reference (ToR) vide ToR letter dated 20.01.2021. Baseline data was carried out during Dec, 2020 to Feb, 2021 (Winter Season). Public hearing was conducted on 08.10.2021. Proposal for Environmental Clearance (EC) was submitted by the Project Proponent on 23.10.2020.

4. Mining plan along with the Progressive Mine Closure Plan approved by Indian Bureau of Mines vide LrNo. MP/A/17-ORI/BHU/2020-21 dated 01.10.2020 for Mahulsukha Iron and Manganese mine over an area of 390.317 ha (as per DGPS)/399.838 ha (as per RoR) for the period 2020-21 to 2024-25.

5. The total mine lease area is 390.317 ha, out of which 382.437 ha is a Forest land, Pvt land is 1.081 ha and Govt. land is 6.799 ha. The details of the Forest Clearance are given below: -

- i. Stage-II FC granted by MoEF vide F No.8-93/2004-FC dated 18.08.2008 for diversion of 227.0 ha of forest land for 3rd renewal of Mahulsukha Manganese Ore mines in favour of M/s Aryan Mining & Trading Corporation Ltd.
- ii. M/s Patnaik Minerals Pvt. Ltd has submitted the application for Stage-I Forest Clearance vide online proposal no: FP/OR/MIN/122038/2021 dated 19.04.2021 for diversion of entire forest land of 382.437 ha.

6. There are two perennial nalas flowing from the eastern part and Rajabasa nalah flowing from the SW part of the lease area. These perennial nalas merge to form the Bhutuda nalah which flows within the mine lease area and drains into Kurarhi nalah in the north part outside ML area.




7. There are six Schedule-I species are found in the mine lease area such as Monitor lizard, Sloth Bear, Indian Elephant, Leopard, Indian Python and Common Pea Fowl. The Project Proponent has submitted the proof of submission of site specific wildlife conservation plan submitted to the Divisional Forest Officer, Bonai Forest Division on 19.07.2022.

8. The issues raised during public hearing were about Loss of agriculture, Dust pollution, Water pollution, plantation of fruit bearing trees, restoration of natural stream, check dam, employment, construction of village road, deployment of teachers in Village School, Medical facility, Electrification, Drinking water supply, transportation, sports and cultural activity.

9. The instant proposal was earlier considered in the EAC (Non-Coal Mining) meeting held during 5th - 6th December, 2022 and the EAC after detailed deliberations deferred the proposal and was of the view that the proposal may be considered only after the submission of the site visit report by sub-committee along with the certified past production details from the Department of Mining and Geology from the inception of the mine lease area. Accordingly, the site visit was scheduled during 18-21 February 2023. Considering the recommendations of EAC the Ministry vide order dated 30.01.2023 has constituted a Sub-Committee comprising of the following members.

1. Shri Niranjan kumar Vasu, EAC Member
2. Shri. Avijit Ghosh, EAC Member
3. Prof Devesh Walia, EAC Member
4. Shri. Pankaj Verma, Scientist E and Member Secretary EAC, MoEF&CC
5. Dr.T.H Mahato, Scientist D, MoEF&CC, IRO, Bhubaneswar
6. Shri Vidyasagar Jha, Research Officer, MoEF&CC

10. The lease area is approachable from Barbil through 35 km long well maintained metalled road (NH - 215) up to Koira, 8 km metalled road (national highway 215 connecting Rourkela and Koira) and a fair weather road of 10 km which is the link between NH and lease area. There is village road which connects this fair weather road to the mine site. The Committee members conducted a day-long field trip on 20.02.2023, visiting existing mining pits and proposed mining pits within the mine lease area. The project proponent gave a brief overview about the existing structure of this auctioned mine and the proposed course of action planned by them. Primarily, the site visit was to ascertain the issues related to diversion of forest land, wildlife and measures for protection of schedule- I species, water bodies, transportation and present mining status in forest and non-forest land.

	
Mine Pit	
	
Nala	Landslide due to rain

11. The project proponent informed that there are total 15 quarries in the mine lease area out of which only one quarry is being operated by the proponent. It was also informed that there are 6 dumps in the mine site out of which only one is active. Further, the project proponent informed that as of now they are only involved in mining of Manganese as per Environment Clearance (EC) letter J-11015/412/2005-

IA.II(M) dated 05.04.2007, and the annual production is 40000 tonnes per annum. Blasting activities are carried out only once a week. The depth of mining quarry is 536 msl. The Project Proponent also informed that they will start iron ore mining from 3rd year in the already diverted forest land. It is reported that waste material is dumped through trucks/tipper dumpers and sent to the existing dumping sites. In order to assess the ground reality issues related to diversion of forest land, wildlife and measures for protection of schedule- I species, water bodies, transportation and present mining status in forest and non-forest land, the committee also observed the following:

1. The village road which connects the mine site to all weather roads has broken and not suitable for use to transport mineral through dumpers. The existing all weather road is busy due to its use by nearby mines
2. Garland drains/ retaining wall have not been created around the dumps/stocks
3. Dumps are not stabilised and devoid of plantation, it has broken from the top and is sliding due to rainfall/ wind etc
4. Out of six dump site, only one dump site was having a retaining wall without any garland drain
5. Almost all of the mine lease area is forest land, the Project Proponent informed that only 4000 plants have been planted in the periphery as the boundary is already covered with dense forest.
6. The village road was full of dust, water sprinkling was not observed
7. It was informed that blasting is only undertaken once in a week. Hence no mining activity was observed. However, segregation of manganese ore was observed at the processing site.
8. Fresh dung of Elephant was observed at the proposed iron ore mine site within the diverted forest land. Project Proponent stated that they are not going to mine in the undiverted forest land till FC is obtained.
9. Two nalahs namely Rajaba and Bhutuda were observed in the lease area, the Project Proponent informed that they have constructed one culvert on the nalah passing near the entrance of the lease area, the other will be constructed near the dumping site of Nadagira Block.
10. Water sprinkling was observed at the active quarry site, approach road and benches
11. Fencing was not observed, further no markings were observed for the undiverted forest land. Forest pillars and lease boundary pillars were not placed properly.
12. Only one AQM station is present in the entire mine lease area.
13. Limited plantation was seen at quarry number one.
14. The labours/staffs were not wearing safety equipments such as boots, helmets, gloves etc
15. One ambulance was present at the mine site; no primary care facility was seen.

16. The project proponent was not able to show the committee the demarcation of diverted forest land as well as the undiverted forest land on the ground.

	
<p>Dung of Elephant found at proposed iron ore mine site</p>	
	
<p>Worker working without gloves/not wearing full pants</p>	<p>Segregated Manganese Ore</p>

12. Recommendations.

1. Project Proponent should construct all village roads within its lease area and also the one that connects this mine with the all-weather road which connects with NH 215
2. The project proponent should undertake a detailed study of the wildlife present in the area through any of the reputed national institute and prepare a comprehensive wildlife plan for the scheduled species
3. The project proponent should construct retaining wall and garland drains alongside the existing dumping sites (active as well as non-active)
4. Project Proponent should undertake plantation activities alongside the quarries. Permanent water sprinklers are to be placed alongside the plantation and haul roads. Plantation shall be re-conducted in consultation with the State Forest Department.
5. To reduce dust, water sprinkling is to be carried out at a regular interval. The muddy pavements alongside the approach road may either be grassed or

- permanent pavements may be created in consultation with local administration.
6. The Project Proponent should submit the DMG authenticated past production details since the inception of the mine
 7. PP shall indicate the plan to mine the iron ore present in the dumps if any.
 8. The Committee also recommended to take-up community and skill development activities in nearby villages and conducting rapid study need-based assessment to achieve specific SDGs with the help of the local community.
 9. The Project Proponent should undertake Air and Noise quality monitoring at sensitive receptors and it's quarterly review.
 10. Strict compliance to Approved mining plan to be showcased through report annually.
 11. Plantations and social activity reports be submitted annually to IRO, Bhubaneswar of the Ministry
 12. Project Proponent should put up permanent sprinklers alongside the haul roads and programme it such that water is sprinkled at regular interval for better dust suppression.
 13. Project proponent shall construct the culvert for the nalas.
 14. Project Proponent needs to submit stage 1 FC for the entire Forest Area
 15. The project proponent needs to undertake the carrying capacity of the existing road for carrying its ore to the final processing site
 16. The Project proponent was not able to answer most of the queries of the committee; accordingly, project proponent is advised to engage necessary technical manpower who may provide the information as and when sought by the regulatory authority.
 17. The Project Proponent needs to provide the KML of the undiverted forest land inside mine lease area clearing highlighting their boundaries along with coordinates
 18. The project Proponent must provide safety equipments to its employees who are working in the mine lease area. No one should be allowed without their protective gear to work within the mine.
 19. The Project Proponent shall not exceed the production limit without any prior Environment Clearance.
 20. The Project Proponent shall store and stack iron ore if any found during its mining.
 21. The Project Proponent should undertake plantation over dumps to stabilize them for preventing landslides.

List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	1 st March, 2023	2 nd March, 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	No	No
2	Sh. Niranjan Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171	Member	No	Yes
4	Shri. Avijit Ghosh (CMD-Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A-604 Shahadeo Tower, P. P. Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (CMD-South Eastern Coalfields Limited)- (Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Acting Chairman/ Member	Yes	Yes
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi- 110070	Member	Yes	No
7	Prof. Devesh Walia, Professor, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	No
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi	Member	No	No

		Branch, Prof. Ram NathVijMargRajinder Nagar, New Delhi - 110060			
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi IInd Stage, Mysore-570026, Karnataka	Member	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice-Chancellor	Sardar Patel University, Mandi H.P. 175001	Member	No	No
11	Shri V. K. Soni, Representative of India Meteorological Department	Government of India, Ministry of Earth Sciences, India Meteorological Department, Mausam Bhawan, Lodi Road, New Delhi – 110003	Member	No	No
12	Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	No	No
13	Shri Niazi Mohammed	Representative of Directorate General of Mines Safety	Member	Yes	Yes
14	Shri Gowrappan	No. 6, Ganesh Avenue II Street, Shakti Nagar, Porur, Chennai - 600 116, Tamil Nadu.	Special Invitee	Yes	No
15	Shri Pankaj Verma	2 nd Floor, Prithvi Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes
