सत्यमेव जयते Minutes of G 9th & 10t	Ministry of Envis AGENDA FOR 29th NON-COAL MININ th MAY, 2024 THRO n-Coal Mining I	Government of India ronment, Forest and IA Division (Non-Coal Mining) *** MEETING OF THE EXI G SECTOR), SCHEDULI OUGH VIDEO CONFERI held from 09/05/2024 to 1	Climate Change PERT APPRAISAL C ED TO BE HELD DUI ENCING (VC) meeting 0/05/2024	OM RIN Date: 21/05/2024 g No
MoM ID:	EC/MOM/EAC/293	682/4/2024		
Agenda ID:	EC/AGENDA/EAC/	293682/4/2024		
Meeting Venue:	N/A			
Meeting Mode:	Virtual	DIVE		
Date & Time:		a saint	S	
09/05/202	24	10:30 AM		05:30 PM
10/05/202		10.20 AM		05 20 DM
10/05/202	24	10:30 AM		05:30 PM

1. Opening remarks

The 29th meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 9-10th May, 2024 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.

2. Confirmation of the minutes of previous meeting

(1.0) Deliberation & Circulation on the Minutes of 28th EAC (Non-Coal Mining) meeting held during 14th March, 2024 & 15th March, 2024.

The minutes of the 28th Meeting of the EAC (Non-Coal) held during 14thMarch, 2024 &15th March, 2024 were placed before the members of the EAC and confirmed by the Chairman.

3. Details of proposals considered by the committee

Day 1 -09/05/2024

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

"Surve Larung Lumshnong Limestone Deposit (44.58 Ha.)" with a proposed maximum excavation 1366475.2 TP A (654577 TPA of limestone and 711898.2 TPA of waste including topsoil) by M/s. Green Valliey Industries Limited. by GREEN VALLIEY INDUSTRIES LIMITED located at EAST JAINTIA HILLS, MEGHALAYA

Proposal For		Fresh ToR		
Proposal No	File No	Submission Date	Activity (Schedule Item)	
IA/ML/MIN/457835/2024	IA-J-11015/25/2024-IA-II(N CM)	01/04/2024	Mining of minerals (1(a))	

3.1.2. Project Salient Features

The proposal is for Terms of Reference (ToR) for Surve Larung Lumshnong Limestone Deposit with total excavation capacity of 1366475.2 TPA (654577 TPA of Limestone and 711898.2 TPA of Waste including Topsoil) in ML area of 44.58 Ha by M/s. Green Valliey Industries Limited located at Village Lumshnong, District East Jainitia Hills, Meghalaya.

2. The details of the project as ascertained from the document 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: 25°11'02.49" N to 25°11' 21.32" N and Longitude: 92° 23' 38.79" E to 92° 24' 23.78" E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 and falls in Seismic Zone-V.

ii. The project activity listed at schedule no. 1(a) of Mining of Minerals. The instant project attracts General condition due to the presence of Eco-Sensitive Zone of the Narpuh Wildlife Sanctuary at 3.47 km and Narpuh Wildlife Sanctuary at 4.62 km in SE direction in SE to the project site and falls under Category "A" of the schedule of the EIA Notification, 2006.

iii. Details of Mine Lease in a chronological manner:

S.No.	Prospecting License/ Let ter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of th e gra nt	Name of the Mineral & (Major/ Min or)	Peri od o f Gr ant	Granted by	Mine l ease a rea in Ha
1	Letter of Intent/ authoriz ation order- MG.75/202 2/220	28.0 9.20 22	Limestone		Mining & Geology Department, Gover nment of Meghala ya	44.58 ha.
iv.	Land Use/Land Cover of the	Mine L	ease Area:		Ι	

Private land	Nil	
Government land	Nil	
Forest land	44.58 ha.	

Total Mining lease area (MLA), ha	44.58 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

NA	

v. Mining plan detai	ls:
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	Letter No.	MCDR-MPCP0CaF1/7/2023-GUH-IBM_RO_ GUH	
	Date	03.10.2023.	
Mining Plan(approved b y Indian Bureau of Mine s/DMG)	Mineral (Major/Mino r)	Major	
	Mine Lease Area, Ha	44.58	
	Validity	5 years	
Mining Parameters	Quantitative D	escription	
Method of Mining	Opencast mech	anized mining using HEMM	
Drilli <mark>ng/Blasting</mark>	Deep hole drilling & blasting.		
Geological Reserves	33.82 million tons of Limestone		
Mineable Reserves	21.36 million ton of Limestone		
Breakup of Total Excava tion (Topsoil/OB/SB/IB/Mine ral Rejects/Waste, MTP A)	1366475.2 TPA (654577 TPA of limestone and 711898.2 TPA of Overburden/waste including topsoil).		
Life of mine	The life of mine is estimated at about 34 years considering the m ineable reserves based on present exploration.		
Mine Bench Height & B ench Width	The width of the benches in mineral will be 9 m for safe operation n of mining machinery. The height of the bench will be 6 m.		
No. of Mine Benches	23		
Existing Depth, m bgl	NA, as it is a green field project		

Ultimate Depth of M g, m RL	Minin	448			
Ground Water Tab RL	le, m	447.643			
Details of groundwa tersection	ater in	The water t d mining w	cable will not be intersected ill be done up to 448 mRL	as it is at 447.643 mRL ar	
Individual bench slo	ope	80°			
Overall pit slope		About 34°	c ,		
Details of existing/ j sed Crusher	propo	No crushin	g and screening plant is pro	pposed in the mine.	
Mineral Beneficiation	on	NA	a state		
RoM o <mark>utput size</mark>		-1000 mm			
Transportation details inc luding capacity of dumper/tippe r, mode of transport and distance		The materia s of about (ns carrying ump yards.	al after blasting will be loa 0.90 m ³ bucket capacity in capacity for its transporta	ded by hydraulic excavator to dumpers/tippers of 25 to tion to crusher and waste o	
Generation of Topsoil/O B & its Management duri ng plan period & concept ual period		Max. 7118 be generate arked place plantation. About 10.0 will be gen parately in ed.	98.2 TPA of overburden/wed in any one year. Waste/es. The topsoil generated web. The topsoil generated web. A million tons of waste an erated upto the life of min the temporary dump. The estimate of the temporary dump. The estimate of the temporary dump.	vaste including topsoil will DB will be dumped at earm will be used extensively for ad 0.10 million tons of soil e. Waste will be stacked se entire waste will be backfill	
Generation of Mine ejects/ Waste & its Manage during plan period & ceptual period	eral R ement & con	There will	be no rejection from the m	ne.	
vi. Water require	ement:				
Total water requir	5	0 KLD	Freshwater	40 KLD	

ement	The total water requirement for the proposed mi LD which will be sourced through water tankers ment plant.	ne will be around 50 K 10 KLD from the company's ce			
Source	NOC Obtained from Village Council on 16.08.2008				
Permission					
Additional inform ation(if any)	The total water requirement for the proposed mi LD, Out of this, 40 KLD will be sourced from t 10 KLD will be ETP-treated water.	ne will be around 50 K he villages and the rest			
vii. Nearest villa	ge/town/ highway/railway station/water bodies				
Particulars	Particular's Name	Distance & Direction s			
Village	Lumshnong	1.66 Km - WSW			
Town	Khliehriat	18.9 <mark>3 k</mark> m - NW			
Highway	NH-6	0.57 km - SE			
Interstate Boundary	 Meghalaya-Assam State Boundary India-Bangladesh International Boundary 	11.37 Km SE 13.13 Km SSW			
Railway station	Hilara railway station	33.45 km - SE			
Water bodies	 Um Badoh (Ephemeral Nala) Um Lunar Kukha Nala Khaddum Pieltleng Falls Thangpyrshaid Nala Lukha River Lubha River Dongtangle Nala Um Lutha Drain Um Lahe Um Sangat Sakha Nala Seshympa River Um Satein Wah Thariang Nala 	1.88 Km - WNW 2.33 Km - SE 3.56 Km - N 4.31 Km - SE 4.38 Km - NW 4.49 Km - SE 4.52 Km - SSE 4.63 Km - NE 5.03 Km - NE 5.03 Km - NE 5.50 Km - NE 5.54 Km - NW 7.34 Km - W 7.91 Km - SW 7.99 Km - N 8.16 Km - NE			

	• I • U • A • U	Dongtongle Jm Thlu Apha Nala Jm Tharang	Nala	8.25 Km - NE 10.52 Km - SE 11.20 Km - SW
Forest	Narp	ouh Reserve	e Forest	8.42 km SW
viii. Presence o	of Environ	mentally S	ensitive areas in the study area	
Forest Land/Protec a/Environmental S y Zone	cted Are ensitivit	Yes/N o	Details of Certificate/letter is Department mentioning the L remarks	ssued by the concerned ar no, date of grant, and
Forest land within e lease area and (if tus of Forest Cleara	the min yes) sta ance	Yes	The application for Stage-I for submitted on the MoEF&CC FP/ML/MIN/QRY/463287/20	orest clearance has been portal vide proposal no. 024 dated 24.02.2024
National Park		No	Not Applicable	
Wildlife Sanctuary		Yes	Narpuh Wildlife Sanctuary - 4.62 km SE	
Eco-S <mark>ensitive Zone</mark> Eco- <mark>Sensitive Are</mark>	e(ESZ) / a(ESA)	Yes	Narpuh Wildlife Sanctuary E	SZ - 3.47 km SE
Coastal Regulation Zone (CRZ)		No	Not Applicable	
Schedule-I species nd name of schedu cies with the authe letter)	(No.s a ile-I spe enticated	No	The details will be submitted ort.	along with the EIA rep
Wildlife Conserva n	tion Pla	No	The conservation plan will be he EIA report.	submitted along with t
ix. Green belt/p	olantation	details:		
Proposed area fo r green belt/plant ation The mining lease comprised a total of 44.58 ha of land. 44 ha will be used for mining and 3.14 ha will be the vire e greenbelt. Out of the total mined-out area, 23.86 ha. will n.		land. Out of which, 41. the virgin area under th ha. will be backfilled a ed by bench afforestatio		
Budget for green plant & plantatio n till the end of 1	en Rs. 87,64,740			

ife of mine.	
No. of tree cuts i n the mine lease area and compen satory afforestati on 350 trees v A total of a	vill be cut in the mine lease. about 97386 trees will be planted up to the conceptual period.
Particulars for G reen belt/plantati on	red (in Ha)
7.5 m barrier & non-mineralized zone3.14 Ha.	e-KYC C4A
x. Baseline detail:	RIVE
Baseline Data (Air / Water / No	bise / Soil / Hydro geological study/ Traffic Study/others
Period of baseline data collection	on Dec 2023 to February 2024
Seaso <mark>n (Summer / P</mark> re-monsoo t- mo <mark>nsoon / Winter</mark>)	n / Pos Winter Season
xi <mark>. Details of proje</mark> ct cost a	nd employment:
Particulars	(Rs. In Lakhs)
Project Cost	Rs 30.14 crores
T I I	CACREE S

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The instant proposal is for Terms of Reference for Surve Larung Lumshnong Limestone. The Project attracts General condition due to the presence of Eco-Sensitive Zone of Narpuh Wildlife Sanctuary located at 3.47 km from the project site and falls under Category "A" of the schedule of the EIA Notification, 2006.

The EAC observed that the mine lease area falls near to Wildlife Sanctuary and located in the vicinity of Seismic Zone-V which requires special attention in order to protect local species, habitats

during the mining. The EAC noted that the data collected during the month of December 2023 to February, 2024 needs to be relooked by the PP, the EAC was of the opinion that the baseline data collected during the aforesaid period doesn't take into account the hibernation period of the wildlife species prevalent in the mine lease area and its surroundings. The EAC opined that a comprehensive baseline data (at least 15 days) including the impact of mining caused on the local habitat and species should be collected by the PP.

Thereafter, the EAC enquired about the sourcing of water, PP replied that they will be sourcing their fresh water requirement of about 40 KLD for the instant mine from their cement plant which is located at distance of 13.33 km approx. PP informed that a water spring is located adjacent to their cement plant and they have obtained the NoC from the Gram Panchayat to source water from there for use in their proposed mine. EAC opined that presence of spring water establishes the fact that ground water table is not located at much depth. EAC stated that these activities will require movement of large number of water tankers to and fro from the mine lease area causing the rise in emission and traffic. The EAC enquired the ground water level of the mine lease area, PP informed that ground water is located at 447.643 mRL and the water table will not be intersected during the entire period of mining. The EAC advised the PP to provide the ground water level data for pre monsoon and post monsoon period. EAC also asked the PP to submit the impact of mining on the rivers near the mining lease area i.e. Lubha and Luka river.

From the KML presented during the meeting, EAC observed that the lease area is not far away from the ESZ of Narpuh Wildlife Sanctuary and has pristine green belt coverage. Accordingly, the EAC asked the PP about the movement of wildlife within the lease area and its surroundings. PP informed that the lease area is not a part of any wildlife corridor. However, EAC was of the opinion that there must be some movement of wildlife owing to its location and pristine nature. EAC advised the PP to conduct a study with regard to the movement of wildlife within and surrounding of mine lease area.

While discussing the transportation route from the mine lease area to the national highway 6, PP informed that they will construct a haul road of 2.3 km length to connect the mine lease area with the national highway. EAC was of the opinion that PP may explore the feasibility of laying a over belt conveyer upto the highway instead of cutting trees and making a haul road to ensure barrier free movement of wildlife. PP informed that they will explore the feasibility of the same.

The EAC further noted that PP has not proposed the use of crusher within the mine lease area. PP informed that they will be directly transporting the mined out mineral to their cement plant where they have already established a crusher. EAC was of the opinion that the PP should include the provision of installing one mobile crusher within the lease area, so that the mined ore is crushed before transportation through OLBC to the nearest highway (NH 6).

During the discussions, EAC pointed out that waste generation is more than the actual Mineral being generated and accordingly asked the PP to compute the cost-benefit analysis keeping in mind the waste generation from the mining.

In view of the above discussions, the EAC concluded that the mine lease area is located in the vicinity of the ecologically sensitive and fragile area. Thus, the EAC opined that it is necessary to ascertain the ground reality on the proposed methodology of mining, habitation, afforestation, transportation, situation of ground water and existing spring water and nearby river. 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.

Based on the above observation, the EAC deferred the proposal and asked to submit the requisite information:

- i. The Project Proponent needs to submit the comprehensive baseline data (15 days) considering the impacts of mining upon local habitat and species. PP shall also submit the comparison of the existing baseline data of the industries located within 10 km periphery of the mine lease area.
- ii. PP needs to submit the NOC from Ministry of Defence.
- iii. PP shall explore the feasibility of laying a over belt conveyer upto the highway instead of cutting trees and making a haul road to ensure barrier free movement of wildlife.
- iv. PP shall explore the feasibility of incorporating a mobile crusher within the mine lease area for crushing the mineral before transportation.
- v. The Project Proponent needs to submit the NoC from the Gram Panchayat for withdrawal of water from existing spring water source.
- vi. The Project Proponent needs to submit the pre and post monsoon level of ground water.
- vii. The Project Proponent needs to compute the cost-benefit analysis w.r.t. generation of more waste than minerals and also conduct the scientific study for managing the dump within the ML area.
- viii. PP shall conduct a study and submit the report with regard to the movement of wildlife within and surrounding of mine lease area.
- ix. The project proponent should submit the compliance of the site visit to be conducted by a subcommittee comprising of EAC members and officers from the Ministry.

3.1.5. Recommendation of EAC

Deferred for ADS

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Amendment in EC of Bolani Ores Mines (6.90 Sq Miles ML) allowing liquidation of old iron ore dump fines prod uced from adjoining 5.10 Sq Miles ML and stacked in 6.90 Sq. Miles ML through dispatching for selling in open market or captive use directly or supplying to conversion agents for captive use of converted pellets without any change in approved configuration keeping the excavation and dispatch of dump fines from both mining leases wi thin 3 MTPA as per the approved EC of 5.10 Sq. Miles ML by STEEL AUTHORITY OF INDIA LTD located at KENDUJHAR,ODISHA

Proposal For		Amendment in EC		
Proposal No	File No	Submission Date	Activity (Schedule Item)	
IA/OR/MIN/466261/2024	J-11015/418/2008-IA.II(NC M)	18/03/2024	Mining of minerals (1(a))	

3.2.2. Project Salient Features

The instant proposal is for amendment in EC dated 21.12.2012, 17.02.2014, 30.07.2020, 05.08.2021, 19.09.2022 and 13.09.2023 for Bolani Iron Ore Mine with production capacity of 15,000 TPA of Manganese Ore (RoM) in the ML area of 1786.74 ha or 6.9 sq mile of M/s SAIL located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meetingare given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at Central level.
- ii. The mine lease area is located between Latitude 22°05'11.65848"N 22°07'46.2869"N and Longitude 85°16'52.81330"E 85°20'13.85260"E. The mine lease area falls under the Survey of India Toposheet no: 73 F/8 (F45H8) and falls in Seismic Zone-II.
- iii. The Project Proponent has submitted the chronology of the Environmental Clearance (EC) as mentioned below:
 - a. The Project Proponent obtained Environmental Clearance (EC) on 21.12.2012 for Bolani Iron Ore Mine with production capacity of 15,000 TPA of Manganese Ore (RoM) in the ML area of 1786.74 ha or 6.9 sq mile of M/s SAIL located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.
 - b. The Project Proponent obtained Environmental Clearance (EC) on 21.12.2012 for enhancement of production of iron ore from 5.65 million TPA to 12.0 million TPA (ROM) in Bolani Iron Ore Mine (5.1 Sq. mile) along with installation of a new beneficiation plant of 12 million TPA throughput and pellet plant of 4.0 million TPA capacity of M/s SAIL, located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.
 - c. Subsequently, the Project Proponent obtained amendment in EC dated 21.12.2012 on 17.02.2014 w.r.t Para 6 (iii) and in addition the following was added to the EC letter "There are two adjacent mining leases in 'Bolani Ore Mines viz Bolani 5.1 Sq. miles lease' 'Bolani 6.9 Sq. miles lease'. Bolani 5.1 Sq. miles lease is the iron ore bearing area whereas Bolani 6.9 Sq. miles lease is manganese ore bearing. Common infrastructure facilities for both the mines viz. railway siding & loading yard township, tailing pond, water intake point etc. are located in 6.9 Sq. miles lease" and that the mine working will be open cast fully mechanized instead of semi-mechanized.
 - d. Thereafter, PP obtained EC on 30th July, 2020 under para 7(ii) of EIA Notification 2006 (as amended) for change in excavation & dispatch pattern by increasing excavation and dispatch of iron ore fines from existing Fines Dumps up to 3.0 MTPA (from present 0.5 MTPA) and Modification of Mining parameters including updating of reserves and waste generation keeping total production within approved EC capacity of 12 MTPA. Bolani Iron Ore Mine (1321.45 ha) is located at Villages Boiani & Balagoda and Karo Reserve Forest (R.F.) in Barbil Tehsil, Champua Subdivision, Keonjhar District of Odisha with one of the specific condition that "This amendment is valid for a period of one year and the same may be extended after the site visit or compliance monitoring by Regional Office, whichever is earlier".
 - e. Further, PP obtained EC vide letter dated 05.08.2021 for amendment/extension of validity of EC dated 30.07.2020 for one year along with permitting dispatch of 8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump by SAIL's Bolani Rly. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and1.5 MTPA from fines dump by Public Sidings Bolani/Barbil or by Road keeping total production within approved EC Capacity 12 MTPA under Para 7(ii) of the EIA Notification 2006.
 - f. Again, the PP obtained amendment in EC on 19.09.2022 for the amendment in EC's dated 30.07.2020 and 05.08.2021 for extension of validity of EC for a further period of one year along with permitting dispatch of 8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump by SAIL's Bolani Rly. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and1.5 MTPA from fines dump by Public Sidings Bolani/Barbil or by Road keeping total production within approved EC Capacity 12.0 MTPA located at village Boiani, TehsilBarbil, District Keonjhar, Odisha. This amendment in EC is valid upto 18.09.2023.
 - g. Later on, the PP obtained amendment in EC on 13.09.2023 for amendment in EC's dated 30.07.2020, 05.08.2021 & 19.09.2022 of M/s SAIL for extension of validity of Environmental Clearance for further period of 02 (Two) years to liquidate entire stock of old Dump Fines from Bolani Iron Ore Mines by (i) continue excavation of iron ore fines from old Fines Dumps maximum up to 3 MTPA for selling in open market or supplying to external pellet conversion agencies for captive use of converted pellets keeping the total production within EC capacity

of 12 MTPA, (ii) continue dispatch of 8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump with total dispatch up to 10 MTPA by SAIL's Bolani Rly. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and 1.5 MTPA from fines dump with total up to 2 MTPA through public roads leading to Public Sidings at Bolani / Barbilor beyond NH 520 within approved EC Capacity 12.0 MTPA, in the mine lease area of 1321.45 ha, located at Village Bolani, Tehsil- Barbil, District Keonjhar, Odisha.

- iv. In the instant proposal, the Project Proponent requested for amendment in EC's letter dated 21.12.2012 forBolani 6.90 Sq Miles ML (1786.74 ha) allowing liquidation of old iron ore dump fines produced from adjoining Bolani 5.10 Sq Miles ML and stacked in Bolani 6.90 Sq. Miles ML through dispatching for selling in open market or captive use directly or supplying to conversion agents for captive use of converted pellets without any change in approved configuration keeping the excavation and dispatch of dump fines from both mining leases, within 3.0 MTPA, as per the approved EC of Bolani 5.10 Sq. Miles ML under Para 7(ii) of the EIA Notification 2006 at Village Bolani,Balagoda, Limitur etc. Tehsil Barbil, District Keonjhar, Odisha
- v. The Project Proponent has submitted the following justification for instant proposal for liquidation on the strength of EC of Bolani 5.10 sq miles ML:
 - a. No change in process and/or technology, product mix, handling capacity of the mineral.
 - b. The assessed the likely impacts, on the local road infrastructure and air quality of the area, due to the proposed liquidation of dump fines shall remain unchanged.
 - c. The baseline environmental data covering air, water, noise etc., in and around Mines, has been carried out and incorporated in the addendum to EIA/EMP Report which shows that the environmental quality in and around was found to be within the permissible limits.
 - d. The proposed liquidation of fines will not only result in effective utilization of these low grade minerals, but also eliminates environmental hazards for Bolani 6.90 sq miles ML associated due to storage of fines besides meeting the iron ore demand during scarcity period of the country.
- vi. The Project Proponent has informed that the 4.123 MT of iron ore dump fines stacked inside this ML, which were originally generated from the adjoining 5.10 Sq Mile ML, is proposed to be evacuated in the strength of Amended EC grant Order dated.13.09.2023 of Bolani 5.10 Sq Miles ML.

vii. The Project Proponent has submitted the following effect on configuration of Bolani 1321.45 ha or 5.10 SQ Miles ML area:

Plant / Equipm ent / Facility	Existing Configuration a s per EC amendment ord er dated 13.09.2023	Configuration as per Instant Proposal	Remarks, if any
Iron ore excav ation from Fin es Dumps	3 MTPA Dump Fines fr om 5.10 sq miles ML	3 MTPA Dump Fines from 5.10 sq miles ML + 6.90 sq Mile ML 37000000000000000000000000000000000000	No change in handling quantity of dump fines from Bola ni Ores Mines complex
Dispatch by S AIL's own sidi ng	Max. up to 1.5 MTPA d ump fines from 5.10 sq miles ML	Max. up to 1.5 MTPA dump fines from 5.10 sq miles ML + 6.90 sq Mile ML	Within the earlier appr oved EC capacity
Dispatch of du mp fines by ro ad	Max. up to 1.5 MTPA b y Road & Rail or only R oad from 5.10 sq miles ML	Max. up to 1.5 MTPA by Ro ad & Rail or only Road from 5.10 sq miles ML + 6.90 sq Mile ML	By road to Bolani Pub lic/Barbil Railway Siding or dire ctly by road to the final destination
Dispatch of fre	Max. up to 0.5 MTPA b	No Change	No Change from earli

sh Iron Ore on road y Road & Rail or only R oad from 5.10 sq Mile ML	er EC in despatch of max. 2MT PA(0.5MTPA fresh Iron Ore& 1.5M TPA dump fines) by road
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3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The instant proposal is for amendment of EC letter dated 21.12.2012 for liquidation of old iron ore dump fines produced from adjoining Bolani 5.10 Sq Miles ML and stacked in Bolani 6.90 Sq. Miles ML through dispatching for selling in open market or captive use directly or supplying to conversion agents for captive use of converted pellets without any change in approved configuration keeping the excavation and dispatch of dump fines from both mining leases.

The EAC pointed out that the instant application is inconsistent with the judgement passed by the Hon'ble Supreme Court in the matter of Goa foundation vs Union of India WP (C) No. 435/2012 dated 21.04.2014. As per the sub-para (ii) of para no. 71 of the judgement:

"dumping of minerals outside the leased area of the mining lessees is not permissible under the MMDR Act and the Rules made thereunder".

Therefore, the EAC asked the Project Proponent to submit the certificate from the state government for clarifying the exact duration in year in which the old iron ore dump fines are generated, their exact quantity and location of dump as per the then approved Mining plan. EAC also noted that the ML area as per the EC letter dated 21.12.2012 is 1786.74 ha while as per the documents submitted in the instant EAC meeting the lease area is 1586.36 ha or 6.9 Sq miles. Therefore, PP was advised to submit the Mine lease documents of Bolani iron ore mine of 6.9 Sq. miles along with its chronology.

In view of the above, the Committee **deferred** the proposal and asked to submit the following information:

- i. The Project Proponent needs to justify their proposal w.r.t. judgement dated 21.04.2014 of Hon'ble Supreme Court in the matter of Goa Foundation Vs UOI.
- ii. The Project Proponent needs to submit the certificate from the Department and Mines Geology, Govt. of Odisha clearly stating the source of the dumped iron ore and its generation period (before or after year 2014). The State Govt. shall also mention the year till which the fine iron ores were dumped.
- iii. The Project Proponent needs to submit the year-wise authenticated quantity of old iron ore dump in tabular form.
- iv. The Project Proponent needs to submit the authenticated documents such as Mine plan or any other document showing the dumping location of old iron ore dump.
- v. The Project Proponent needs to submit the Mine lease documents certifying the exact mine lease area of 1786.74 ha or 1586.36 ha or 6.9 Sq miles.

3.2.5. Recommendation of EAC

Deferred for ADS

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Expansion of chrome ore production capacity from 0.3 MTPA to 0.9 MTPA at Sukurangi Chromite Mines by O DISHA MINING CORPORATION LIMITED located at JAJAPUR,ODISHA					
Proposal For Fresh ToR					
Proposal No	File No	Submission Date	Activity (Schedule Item)		
IA/OR/MIN/458763/2024	J-11015/348/2015-IA.II(NC M)	16/04/2024	Mining of minerals (1(a))		
	JV1.				

3.3.2. Project Salient Features

The proposal is for Mining of Chrome ore with enhancement in production capacity from 0.3 to 0.9 MTPA in the ML area of 382.709 ha by M/s Odisha Mining Corporation Ltd. located at villages Sukurangi, Saruabil, and village limits of Ostapal, Kamarda and Talangi, Tehsil Sukinda, District Jajpur, Odisha.

2. The details of the project as ascertained from the document 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 21°02'32.10822"N to 21°03'46.96573"N and Longitude 85°47'47.57164"E to 85°49'19.86763"E. The mine lease area falls under the Survey of India Toposheet No: F45N16 and falls in Seismic Zone-II.
- ii. The project falls under Category "A" under schedule no. 1(a) of Mining of Minerals of the schedule of the EIA Notification, 2006 and its subsequent amendments.
- iii. Detail of ToR:

ToR Proposal No.	IA/OR/MIN/458763/2024
Online application date for Form-I	25 th March 2024
Documents Submi tted	Cover letter, CAF, Form 1 (Part A), Form 1 (Part B), kml file of the ML area, S of Toposheet Map, Lease Deed, Authorization of Applicant, Conceptual Plan, Mining Plan drawings.
Production capacit y in million tonne s per annum only	0.9 MTPA (ROM) Chrome Ore
Waste	8.5981 MTPA (Waste Rock)
Total Excavation(with break-up) in million tonnes per annum only	9.4981 MTPA
ROM in million to nnes per annum o nly	0.9 MTPA

Crusher		1 x 250 tph Primary Crusher and 1 x 250 tph Secondary Crusher will be set up. The Secondary Crusher will process the output of the Primary Crusher. 1 x 250 tph triple deck vibrating screen will be installed to screen crushed ROM to sepa rate out -10 mm material (containing >40% Cr_2O_3) – the final product.				
EIA/EMI d on	P uploade	The instant proposal is to based on approved ToR.	for approval of ToR. EIA-EMP report will be prepared			
Previous s	EC detail	Accorded by MoEFCC 2020 for Chrome Ore pr	vide letter No. J-11015/348/2015-IA.II(M) dated 30.07. oduction capacity : 0.3 MTPA			
Applic ation f or the Minin g lease area a nd Dat e	25.04.197	20 e-KYC	$C_{A,F}$ $I \bigvee E$			
Validit y of m ine lea se	19.09.203	SO REAL	रदाति सहस्ता म			
Chron ology of leas e exte nsion i f any	From 20.0 From 20.0 From 20.0	m 20.09.1980 to19.09.2000 [Initial] m 20.09.2000 to19.09.2020 [1st Extension] m 20.09.2020 to19.09.2030 [2nd Extension]				
Additi onal in format ion(if any)	Sukurangi ML was granted and executed in favour of M/s Sirajuddin & Co. for a period 20 years from 26.03.1959 to 25.03.1979. After 4 years of operations, it was determined of 05.04.1963 by the State Govt. Odisha Mining Corporation (OMC) was then allowed by the State Govt. vide their letter No. III(G)M, 13/70-5592-MG, dated 20.07.1970 to operate the said lease as an agent of the State Govt. till formal grant of the said lease to OMC in 1971 y expanding the area broken by M/s Sirajuddin & Co. Govt. of Odisha in their erstwhile N ning & Geology Dept. Proceeding No. III(G)-MG-10/78-7924 dated 05.08.1978 and grant d a Mining Lease for exploration of chromite in Sukurangi chromite mines over an area 382.709 ha for a period of 20 years. Lease has been extended up to 19-09-2030.					
		Letter No.	MCDR-MiFL0CR/12/2023-BBS-IBM_RO_BBS			
		Date	19.03.2024			
		Validity	2024-25 to 2028-29			
Mining Parameter s		Quantitative Description				

Panah Unight	6 m					
Bench Height	6 m					
Bench Width	10 m					
Method of Mining	A-Mec	hanized, Open Cast Minir	ıg			
Individual bench s lope	70°					
Overall pit slope	24°-30	0				
Drilling/Blasting	HEMN ers.	1 with deep hole drilling &	z blasti	ng with combination	on of loaders and tipp	
RoM output size		Type of crusher	Pr	oduct size in mm		
1	Prin	hary Crusher (Jaw Crusher)	-100		
	Secor	dary Crusher (Jaw Crushe	er)	-50		
	Tri	ole Deck Vibrating Screen		-10		
		0	C			
Life of mine	16 year etailed	rs on the basis of Proven I exploration.	Reserve	es. May be revised	on the basis further d	
Transportation det ails	By truc	cks to consumers of nearby	y railw	ay siding(s) at buye	rs' discretion	
Dumpers capacity	35 t		D			
Private land		A	97.55	544 ha		
Government land		^e Protects of S	17.94	146 ha		
Total Mining lease ar	ea (ML	A)	382.7	709 ha	م الله	
Additional informatic	n(if an	y)	Fores	est Land (267.210 ha)		
Particulars	Pa	rticular's Name		Distance & Directions		
Nearest railway static	n Ba	ghupal on Padapahar Jn.	nts	~21.5 km (E)		
Populated areas	Br	ahamnipal town		~23 km (SE)		
Nearest Highway	Daitari- Paradeep Express Highway			~18 km (NE)	~18 km (NE)	
Water Bodies	a. Damsal Nala b. Talangi Nala c. Nadibarana Nala d. Pandaral Nala			0 (Damsal Nala 1.4 km (NE) 3.8 km (W) 7.5 km (S)	flows through ML)	
Total water requirementPotable: 60 m³/dayIndustrial: 530 m³/day				Fresh water	60 m ³ /day	

		Treated water	530 m ³ /day			
Source	Industrial: Recycled effluents/mine discharge water Potable: Bore-wells					
Permission	NOC obtained from CGWA vide letter No. CGWA/NOC/MIN/REN/ 2/2022/7118, dated 02.11.2021, valid upto 30.11.2023. Renewal of N OC is under considerations.					
Additional information (if any)	No fresh water is utilized for Industrial purpose.					

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/ Envi ronmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks			
Forest Land	Yes	Forest Clearance obtained for the entire Forest Land (267,210 ha) within the ML area			
National Park No					
Wildlife Sanctuary	No	रविति स्टब्स्			
Eco-Sensitive Zone(ESZ) /Eco-S ensitive Area(ESA)	No	sq			

x. Availability of Schedule-I species in study area – Available/ Not Available If available - authenticated list of flora/fauna details

Schedule-1 species	Yes/No	Details of Certificate/letter/Remarks
Schedule-I species	Yes	Schedule-I fauna found in the 10 km study area are Ratel, Leo pard, Sloth bear, Indian Elephant, Mouse deer, Pangolin, Wol f, Bengal Monitor Lizard, Python, Peafowl.
Status of Wildlife C onservation Plan Additional informati on (if any)	Approved	Revised Site-Specific Wildlife Conservation Plan approved by PCCF (WL) & CWLW, Odisha vide memo no. 8426/7WL-F D & WLC-159/2020 dated 16-10-2020.

xi. The status of Forest Clearance/Wildlife Clearance/CRZ/CGWA, if applicable:

The mine lease area comprises of 267.21 ha of Forest Land. Stage – II FC for the entire forest land (267.210 ha) within the ML area has been accorded. Details of FC accorded by MoEFCC are given below:

- a. Stage-II FC over 104.79 ha Forest land within ML area received vide letter no. F. No. 8-104/2000-FC dated 21.07.2011.
- b. Stage-II FC over 162.42 ha (including 24.15 ha for Safety Zone) Forest land within ML area received vide letter no. F. No. 8-22/2016-FC dated 31.07.2023.

xii. Status of CTE/CTO.

a. Consent to Establish (CTE) for 0.3 MTPA of Chrome ore has been granted by State Pollution

Control Board, Odisha vide letter no: 7315/IND-II-CTE-6476 on dated 21.05.2021.

b. Consent to Operate (CTO) has been granted from the State Pollution Control Board, Odisha vide letter no 4412/IND-I-CON-388 dated 28.03.2024for 0.3 MTPA of Chrome ore and is valid up to 31.03.2025.

xiii. Green belt/plantation details:

Proposed a rea for gre en belt/pla ntation		Sl. No	Year	Green Be lt Locatio n (s)	Area Prop osed to be Covered (Ha)	Number of Plants Pro posed	Expected Survival R ate (%)	Estimated Ex penditure (IN R)
		1	2024- 2025	Existing Dump	0.75	500	>85%	702479
		2	2025- 2026	Existing Dump	0.75	500	>85%	702479
		3	2026- 2027	Existing Dump	0.75	500	>85%	702479
		4	2027- 2028	Existing dump	-0.75	500	85%	702479
		5	2028- 2029	Existing Dump	0.75	500	85%	702479
Particulars for	or C	Green l	oelt/planta	ation		12 1		Area covered (in

	Ha)	
7.5 m wide all along ML area (except common boundary between adjoining So uth Kaliapani ML of OMC)	6.35	
50m on either side of Damsal nala	18.00	
10 m on either side of the road	1.9	
Court Case No		
R & R details No R&R		
Affidavit/Undertaking OMC has submitted an undertaking by way of notariz 3.04.2024in compliance of the Ministry's OM no. 3-	zed Affidavit da 50/2017-IA.III(ited 0 Pt.) d

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Total Cost Rs. 296.02 Crores [Existing Cost – 32.02 Crores; Expansion Cost – 264 Crores]
Employment	628

xviii. Additional information submitted by Project Proponent:

Violation of EIA Notification-1994/2006 for producing minerals without prior EC from Sukurangi Chromite mines during 1993-94 to 2008-09. Demand Notice for depositing Rs. 3,90,64,416 (Rs. Three

crore ninety lakh sixty-four thousand four hundred sixteen only) was issued by the office of Dy. Director of Mines, Jajpur Road Circle, Jajpur Road vide letter no. 547 dated 10.04.2018. OMC paid the entire penalty amount towards the demand raised.

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The Instant proposal is for Terms of Reference for enhancement in production capacity from 0.3 to 0.9 MTPA without change in ML area for Sukurangi Chromite Mines. As per the kml file shown during the presentation, the EAC noted the presence of Nalah passing through the ML area. In order to manage the same, the Project Proponent was asked to prepare the conservation plan for Nallah. The EAC advised the Project Proponent to incorporate the advance technology by incorporating the latest machinery having the least carbon emission rate and having higher capacity. The EAC also asked the Project Proponent to submit the report on existing carbon emission rate and in which year the carbon emission will be neutralised.

Subsequently, the EAC emphasised that PP should submit a dump management plan incorporating the garland drain and plantation. The EAC made an observation that the PP needs to be cautious while dumping the Overburden, they should avoid dumping the overburden in the mineralised area and the forest area. The EAC also advised the PP to prepare progressive backfilling plan in order to reduce the dump accumulation.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Chrome ore with enhancement in production capacity from 0.3 to 0.9 MTPA in the ML area of 382.709 ha by M/s Odisha Mining Corporation Ltd. located at villages Sukurangi, Saruabil, and village limits of Ostapal, Kamarda and Talangi, Tehsil Sukinda, District Jajpur, Odisha under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions:

3.3.5. Recommendation of EAC

Recommended

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

protection plan

The Project Proponent to prepare the conservation and protection plan for Nallah passing through the Mining Lease area.

machinery

1.

1. The Project Proponent should submit the detail in terms of incorporation of machinery equipped with advance technology and having least carbon emission rate.

carbon foot prints

1. The Project Proponent needs submit the carbon foot prints and carbon sequestration study w.r.t. instant project.

plantation

2.

1.

1.The Project Proponent shall submit the status of plantation which will ensure carbon sequestration
lost due to deforestation and other fossil fuel based activities.

The Project Proponent needs to submit the action plan for carrying out plantation along the 7.5m barrier, safety zone and gap plantation. PP should also submit the details of no of saplings planted and to be planted, type of saplings existing and proposed, existing species wise survival rate and the area covered and to be covered under greenbelt/plantation, density of plantation along with the timeline and budget. The Project proponent also needs to submit the successful rate in compliance to the earlier EC.

dump management plan

1. The Project Proponent needs to prepare dump management plan by incorporating the garland drain and dump plantation.

progressive backfilling

The Project Proponent needs to submit the detail plan for progressive backfilling in order to reduce the dump accumulation.

total excavation

1. The project proponent needs to submit the total excavation which includes ROM, OB, IB etc during the submission of EC proposal.

sequence of mining

The Project Proponent needs to submit the year wise sequence of mining operation and plan for
 backfilling considering the site features such as habitations, school, water bodies, road, etc., and their impacts and mitigation.

restoration plan

The Project Proponent needs to submit the ecology restoration plan for the area to be backfilled and
 reclaimed by plantation along with re-grassing and an area which will be converted into water reservoir.

operational data

1. The Project Proponent needs to submit the efficacy and operational data of the EMP measures undertaken in the past.

real time data

Being an expansion proposal, the Project Proponent needs to submit the real time data monitored for ambient air quality, noise level, ground vibration, water quality, soil quality at the mine site,

1. predominant downwind direction, nearest village, crusher and at other sensitive receptors. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.

state forest department

The Project Proponent needs to submit the letter from the State Forest Department regarding whether the dumping allowed upon the forest area for which forest clearance has been obtained for non-forestry purposes.

list of flora and fauna

1.

The Project Proponent needs to submit authenticated list of flora and fauna as per the latest Wildlife
 Protection Amendment Act, 2022 and the involvement of National Park, Wildlife Sanctuary, ESA/ESZ within 10km radius of the study area.

public hearing

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. The Project Proponent also needs to submit the implementation status of the earlier public hearing concerns.

plant spe<mark>cies</mark>

1.

1.

The Project Proponent needs to undertake the enumeration of the plant species within the mine lease area before cutting them. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.

past production details

1. The Project Proponent needs to submit the certified past production details from the inception of the mine till the time for submission of EC proposal.

ground water

The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same

1. as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

technology upgradation

	The Project Proponent shall explore the possibility of reduction of specific water requirement by
•	optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.

recycle/re-use

1

1.

1.

The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified
 by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.

possession certificate

The Project Proponent needs to submit the possession certificate for already acquired land and also the timeline for acquiring the remaining land at the time of submission of EC proposal. The Project Proponent also needs to submit the implementation status of R&R and data on socio economic that how the mining activity improved the quantity and quality of the local people.

certified compliance report

1. The Project Proponent needs to submit the latest Certified Compliance Report (CCR) by the Ministry's Regional Office as per Ministry's OM dated 08.06.2022at the time of appraisal of EC.

drone survey

The Project Proponent shall conduct drone survey of the mine lease area which includes the mine pit area, dumping area, plantation and transportation route during the appraisal for EC.

transport route

The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road details of no of trips/day to and from capacity of the dumper/tipper to

1. center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.

3.3.6.2. Standard

-Payments

1(
a)Mining of minerals

project details

Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.

A copy of the document in support of rightful lessee of the mine should be submitted. In case of new mines copy of LoI granted by State Government to be submitted. PP should ensure that LoI is valid at the time of grant of ToR. PP should submit the copy of lease deed/supplementary lease deed/extension letter/transfer deed, from its

	initial grant to subsequent renewals/ transfer/extension of validity.
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4.	PP should submit the District Survey Report (DSR) as per S.O. 3611(E) dated 25.07.2018 in case of minor minerals.
5.	Brief of proposal to be submitted which include total excavation of the material required for the production of certain quantity of the minerals, location of the project, mining lease area, latitude longitude, seismic zone etc. In case of expansion project details of expansion viz. expansion in mining lease area or expansion in production of any particular mineral or expansion in total excavation, latest certified Compliance report (CCR) from IRO of conditions granted in existing EC needs to be submitted.
6.	The PP should submit the real-time aerial video footage & video of the mining lease area and of the transportation route.
7.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
8.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
9.	The PP should collect the Baseline data (BLD) in respect of initial level of the mining lease. For this permanent bench marks (BM) needs to be established at prominent location preferably close to mining leases in question and should have precisely known relationship to the level datum of the area, typically mean sea level.
1 0.	In case of sand mining, the entire mining lease area should be divided suitably into grids of 25 m x 25 m with the help of sections across the width of river and along the direction of flow of the river. The levels (MSL & RL) of the corner point of each grid needs to be recorded. Each Grid should be suitably numbered for identification. PP should identity grids which will be worked out and grids which will come under no mining zone i.e. safety barriers from the river bank. PP should comply with the sustainable sand mining management guidelines 2016 and enforcement and monitoring guidelines, 2020 etc.
1 1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
1 2.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
1 3.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
1 4.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
1 5.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
1	Compliance of the Ministry's Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the

6.	matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.									
fore	est									
1.	PP shall submit a certificate from Chief Conservator of Forests regarding involvement of Forest Land in the mining lease area if any. In case forest land is involved i) PP should submit the proof of application made for obtaining forest clearance and ii) a map clearly showing the forest & non-forest area.									
2.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.									
3.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.									
4.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.									
cou	rt matters									
1.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.									
lan	d environment									
1.	PP should submit the details of survey number [viz. survey no, area in hectare, classification of land (government, private, forest, grazing land etc.), villages] duly authenticated by State Government, falling in the mining lease area.									
2.	The study area will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.									
3.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.									
4.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.									
wild	llife									
1.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.									
2.	A detailed biological study of the study area [core zone and buffer zone] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. PP shall submit list of Schedule-1 species present in core and buffer zone duly authenticated by CWLW. In case of any Scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest/Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost. Proof of its submission of conservation plan to the CWLW needs to be submitted.									

3. PP shall submit a certificate from Chief Wildlife Warden regarding distance of mining lease from the protected area falling within 10 KM of the mining lease. In case project requires clearance under Wildlife (Protection) Act,

1972 then copy of application made for the same needs to be submitted.

baseline environment

One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The windrose showing pre-dominant wind direction may also be indicated on the map.

The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear
the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this, PP should submit the original test reports and certificates of the labs from which samples were analyzed.

water environment

The water requirement for the Project, its availability and source should be furnished. Quantity of surface or ground water to be used for the Project should be indicated. A detailed water balance should also be provided. Submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. The capital and recurring expenditure to be incurred needs to be submitted.

A TAIR DO

2. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

rects if She

hydro geology

- 1. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.
- 2. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.

Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working bench will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished. In case of surface water is proposed to be utilized then Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

transportation

Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

lane	land acquisition and r&r									
1.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.									
2.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.									
soci	io-economic environment									
1.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.									
2.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.									
3.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.									
4.	Activity-wise time-bound action plan on the issues raised and commitment made during public hearing to be submitted as part of the final EMP Report in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020.									
env	ironmental monitoring and management									
1.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.									
2.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.									
crit	ritically polluted areas, aravali & crz									
1.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.									
2.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).									

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risk assessment & disaster management

Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case
 of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.

2. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

3. A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

miscellaneous

1.

The general points are also to be followed: - a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Laserda-Pacheri Manganese and Iron Ore Block of M/s. Thriveni Earthmovers Pvt. Ltd. by MS THRIVENI EA RTHMOVERS PRIVATE LIMITED located at KENDUJHAR,ODISHA

CPC CREEN

Proposal For	-Payme	Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/446058/2023	J-11015/113/2021-IA-II(NC M)	30/12/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

The instant proposal is for Environmental Clearance for Laserda - Pacheri Manganese and Iron Ore mining with production capacity of 1.545 MTPA (ROM) of Iron Ore, 1.182 MTPA of waste (Total Excavation of Iron Ore 2.728 MTPA) and 0.110 MTPA (ROM) of Manganese ore, 0.355 MTPA of waste

(Total Excavation of Manganese Ore 0.465 MTPA) along with Dry screening and crushing using 200 TPH x 2 Primary Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen in the ML area of 131.800 ha by M/s Thriveni Earthmovers Private Limited located at Villages Dhanurjaypur, Kanarda and Laserda, Tehsil Barbil, District Keonjhar, Odisha.

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

- i. The instant project activity is listed at schedule no. 1(a) Mining of Minerals and attracts the general conditions as the Odisha Jharkhand Interstate Boundary is located at a distance of 3.19 km from the mine lease area and falls under Category 'A'.
- ii. The mine lease area is located between Latitude 22°03'16.60991''N to 22°04'19.18502''N and Longitude 85°17'53.81761'' to 85°19'15.99748'' E. The mine lease area falls under the Survey of India Toposheet No: F 45H8(73F/8) and falls in Seismic Zone-II.
- iii. Details of Terms of Reference (ToR):

Date of appl ication	Proposal No & File No	Consideration by EAC	Details of ToR	Date of acco rd
10.12.2021	IA/OR/MIN/44 6058/2023 & J-11015/113/20 21-IA-II(NCM)	28-29 Dec, 202 1 & 7-9 Mar, 2 022	ToR was issued to M/s Thriveni Eart hmovers Private L imited for underta king detailed EIA/ EMP study along with recommendat ion made by NEE	28.03.2022
			ion made by NEE RI	SS

iv. Details of Mine Lease in chronological manner:

S.N o	Prospecting License/ L etter of Intent (LoI)/ Gr ant of Mine lease and L r No	Date of the gr ant	Name of th e Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine 1 ease ar ea in H a
1	Letter of Intent for gran t of Composite License No. IV (MISC)SM06/2017848 /SM, Bhubaneswar	27.01.2017	REEN	1 year from the date of i ts issuance	Govt. of Odisha	256.30 4
2	Composite License vid e LrNo.IV (B)SM-100/ 2007-43 3/ SM,	19.01.2019	Manganese	24.01.2019 to 23.01.20 21	Govt. of Odisha	256.30 4
3	Letter of Intent for gran t of mining lease vide No.7731-I V(B)SM-100/2017/SM and LoI valid for a peri od of 3 years from the date of its issuance	21.09.2021	Manganese and Iron	50 years	Govt. of Odisha	131.88 9

4	Revised Lease and aut enticated DGPS Surve map vide Lr No. MXII (b) 80/2015/8031/DM stating that after conduct of DGPS surv y by ORSAC the area ow comes to 131.800 ects instead of 131.88 hects	h 22.01.20 y I // e n h 9)21	Manganese and Iron	50 years	Govt. of Odisha	131.80 0
Privat	e land		35.765			1	I
Gover	mment land	JY2	1.684		C 2		
		Breakup o	of forest l	and of 94.351	На		
Rever	nue forest		53.467	На			
Non f 25.10	orest land recorded as f	orest as on	40.884	Ha			
Total	Forest land	~ 5%	94.351				
Total	Mining lease area (MLA), ha	131.800				
Addit	ional information (if any	Project Revenue ith scat a tropio nd com evenue r from 3/ date of non- In-prin servatio orest C dated 2 4.351H	Proponent su le and Sabik f tered growth cally dry deci sists of agricu record. Proje the Office of d 22.11.2021 forest land as ciple approva on) Act, 1980 Conservation 1 21.12.2023 for la.	Ibmitted that the forest predomin of Sal, Mahua, duous open for alture & non-ag ect Proponent al the Tahasildar showing the st on 25.10.1980 and under Section has been gran Division) vide the use of the	e mine lease antly charac , Kendu etc. est. The non riculture lan so submitted , Barbil vide atus of land over 131.80 -2 of the Fo ted by MoE Lr. No.8-02, entire forest	e involves eterized w which is a-forest la d as per r d the lette e No. 421 schedule 00 ha. rest (Con F&CC (F /2023-FC land of 9	
Minin ressiv	g Plan including Prog e Mine Closure Plan (Letter No.		MP/A/	MP/A/14-ORI/BHU/2021-22		
appro of Mi	ved by Indian Bureau nes/DMG)	Date		18.11.2	18.11.2021		
Mineral & or) Mine Lease			(Major/N	Min Manga	Manganese & Iron Ore		
			e Area, H	la 131.80	0		
		Validity		5 years	s from the date	of lease dee	ed executi

	on				
Mining Parameters	Quantitative Description				
Method of Mining	Fully Mechanized (FM) Opencast mining method with drilling and bl asting				
Drilling/Blasting	Wet Drilling and Controlled Blasting				
Geological Reserves	Iron – 8.368 Mil. Tonnes Manganese – 7.368 Mil. Tonnes				
Mineable Reserves	Iron – 6.226 Mil. Tonnes Manganese – 6.470 Mil. Tonnes It will be further increase after exploration in future.				
Breakup of Total Excavatio n (Topsoil/OB/SB/IB/Miner al Rejects/ Waste, MTPA)	Iron – 2.728 Mil.T, (ROM -1.545 MTPA + Waste – 1.183 MTPA) Manganese – 0.465 Mil.Ts (ROM - 0.110 MTPA + Waste – 0.355 M TPA)				
Life of mine	62 years Life of mine may likely to be changed in future depending upon the f uture changes in cut-off grade, method of working, future resources a nd market demand.				
Mine Bench Height & Benc h Width	Iron - Height -10m, Width-will be equal and more than the height Mn - Height -5m, Width-will be equal and more than the height				
No. of Mine Benches	Will be maintained as per the mining plan				
Existing Depth, m bgl	- Content She was a set of the se				
Ultimate Depth of Mining, m bgl	392m RL GRE				
Ground Water Table, m bgl	490m RL				
Details of ground water inte rsection	The groundwater table lies at a depth of 490mRL. Ultimate depth of mining will be 392m RL. Hence groundwater intersection is envisage d.				
Individual bench slope	80°				
Overall pit slope	37.5 °				
Details of existing/ propose d Crusher	Dry screening and crushing using 200 TPH x 2 Primary Crushing, 20 0 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen				

Mineral Beneficiation	Dry screening and crushing using 200 TPH x 2 Primary Crushing, 20 0 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen								
RoM output size	Iron: 5-18mm, Fines5mm, -10mm, 10-30mm, Lumps- +30mm Manganese: Lumps: +30mm,10-30mm								
Transportation details inclu ding capacity of dumper/tip per, mode of transport and d istance	Iron and Manganese ore from the mines will be transported to Barbil and Bolani Railway Siding through Bolani-Kiriburu PWD road. The r ailway sidings of Bolani & Barbil are located at a distance of 5.6km a nd 12.0 km (by road) respectively.								
Generation of Topsoil/OB & its Management during pl an period & conceptual peri	Waste Manage	ement	Plan Pe d (Mil m)	Plan Perio d (Mil.cu m) Conce iod (J		Conceptual Per iod (Mil.cum)		Total (Mil. cum)	
od	Road Mainten	ance	0.353	3	4	4.546		4.899	
	Dumping		0.78	9	4	4.201		4.990	
	Backfilled in m id	ine vo	F		1	3.983		13.983	
	Total	0-0-0	1.142	2	2	2.730		23.872	
		LUIA	Res 1	1	5-1				
Generation of Mineral Reje cts/ Waste & its Manageme	Mineral Rejec Plan Period (t Mil.T)			(Conceptual Per iod (Mil.T)			Waste Manage ment		
nt during plan period & con	Iron Ore	0.995		3.5	575		Sold Directly o		
ceptual period	Manganese O re	0.184	2R	4.714			r Blended with High Grade		
	Total	1.179		8.2	289				
e.com	The mineral reject will be stacked in 3 places. The temporary mineral reject stack -1 is for manganese ore. The temporary mineral reject st ack -2 & 3 is for iron ore. The temporary mineral reject stack 1 & 2 i s on virgin area and mineral reject stack -3 will be on the top of the al ready refilled and reclaimed area of Laserda pit -1 .								
243	Stack ID			Height (m)		notal Stack Quantity (m ³)			
9 ²	Temporary MR Stack Yard			ard 10 73		73754	/54		
	Temporary MR Stack Yard			Yard 30		260091			
	Temporary MR Stack Yard 1: - 3			.5		95465	í		
Additional information(if an y)The Project Proponent submitted the letter from the Director nes, Odisha vide Lr No. MXIII (b) 36/2021 1197/DM, dated 22 stating that the concerned Mining Officer along with the g Officer of Joint Director of Mines, Joda have enquired the the field on 28.12.2021 & 29.12.2021 and it was observed th re old excavations of low depth in 45 nos of patches of land 2.491 ha (approximately) present inside the applied ML are da-Pacheri Manganese& Iron Block over an area of 131.800 s Thriveni Earthmovers Private Limited. Those excavated an led with thick vegetation growth, as it is evident from the su				ectorate of Mi dated 09.02.20 in the Jr. Minin d the matter in red that there a land covering Larea of Lasar l.800 ha of M/ ed areas are fil he surface map					

	attached during auction of Lasarda-Pacheri Manganese & Iron Block for composite license that many excavated quarry's were previously e xisted inside the composite license area before the grant of composite license to M/s Thriveni Earthmovers Private Limited. As per the repo rt submitted Jr. Mining Officer of Joint Director of Mines, Joda there is no illegal mining carried out by M/s Thriveni Earthmovers Private Limited within the lease hold area.						
Total water requirement	9	983 KLD	Fresh water		911 KLD		
			Treated wate	er	72 KLD		
Source	E	Borewell – 95 KL	D, Mine Pit W	Vater – 888 KL	D		
Permission for withdrawal/ into ection along with details of gra and its validity	ers N ant V d	No Objection Cer WA vide NOC No 1 06.03.2024.	tificate for Gr o. CGWA/NC	oundwater Abs DC/MIN/ORIG	straction from CG / 2024/19982 date		
Additional information (if any)	E e	Based on CGWA	Recommenda	tion, the quanti	ity will be optimiz		
Particul <mark>ars</mark>	Pa	rticular's Name	Distance & Directions				
Villag <mark>e</mark>	La	serda		<300m	DS:		
Town	Ba	rbil	284	5.7Km, NE			
Highway	NH SH SH	H-520 I-10B I-4	Protection of the	4.8Km, E 6.8Km, E 8.4Km, N			
Interstate Boundary	Odune	lisha-Jharkhand I dary	nterstate Bo	3.19Km			
Railway Station/Railway line	Ba	Barbil 6.3Km, NE					
Water Bodies	Ka Se Ga To	Karo River Seasonal Stream Ganse Nala Topadihi Nala		 Passes through lease Within lease area 4.4Km, SE 5.1Km, S 			
Forest	Ul Ka Sid La Ka	Uliburu RFØ.2Km, SEKaro RF<1Km, NW					
Forest Land/ Protected Area/ E nmental Sensitivity Zone	Enviro	Yes/No	Details of ncerned D	Certificate/lette epartment men	er issued by the co tioning the Lr no,		

			date of grant and remarks
Forest Land within the mine lease ar ea and (if yes) status of Forest Clear ance		Yes	The Project Proponent submitted that an ar ea of 94.351 Ha is a forest land. The Project Proponent submitted the in pri ncipal approved granted by the Ministry vi de Lr. No: 8-02/2023-FC dated 21.12.2023 under Section - 2 of the Forest (Conservati on) Act, 1980 in favour of M/s Thriveni Ea rthmovers Private Limited for non-forestry use of 94.351 ha of forest land including 4. 261ha of safety zone (3.858 ha along the M L boundary and 0.403 ha along the PWD r oad) within the granted LoI for ML over 1 31.800 ha for Laserda Pacheri Manganese & Iron Ore Block in Keonjhar District of O disha.
National Park		No	Project Proponent reported that there are n o National Park, Wildlife Sanctuary, Tiger/ Elephant Reserve, Biosphere Reserve, Ra
whulle Salctuary	25	NO dia	msar site within 10 km radius of the study area.
Eco-S <mark>ensitive Zone(</mark> ESZ) /Eco-Sens itive Area (ESA)		Nil	SS C
Eleph <mark>ant/Tiger Rese</mark> rve		No	Karo Karampada – 2.31 km. The Project Proponent has submitted the m ap authenticated by Divisional Forest Offic er, Keonjhar Division.
Coastal Regulation Zone (CRZ)		No	en la companya de la comp
Schedule-I species (No.s and name o f schedule-I species with authenticat ed letter)		Yes	Authenticated list of Flora and Fauna is obt ained from Divisional Forest Officer, Keon jhar vide Letter No. 2044 dated 05.03.202 4.
Wildlife Conservation Plan		Yes	Wildlife Conservation Plan approved by P CCF(WL) & CWLW, Odisha vide letter n o. 10007/ CWLW-FDWC-FD-0024-2022 dated 11.09.2023 with a financial outlay of Rs. 390.402 Lakhs.
Proposed area for green bel t/plantation and no. of sapli ngs proposed	The Project Proponent has proposed to plant 2923 no. of saplings ove r an area of 2.923 ha along the Mining Lease boundary and 50 m of r oad safety zone in Laserda side with expected survival rate of 75% wi th a budget of Rs 5.84 Lakhs. In the post mining stage, overall an area of 127.29 Ha (96.57% of the total lease area) will be covered under vegetation. Plantation will be c arried out in places like mined out area, waste dumps, mineral storag		

		e, reclaimed infrastructure area, unused and safety zone area etc.			fety zone area etc.	
Budget for green plant & pl antation till the end of life o f mine.						
No. of tree cuts in the mine l ease area and compensatory afforestationTow qual d of ores		Towards sch qual non-fore d of Rs. 5.92 ores addition	Towards scheme of compensatory afforestation, an area of 91Ha of e qual non-forest land and 104Ha of degraded forest land, a total deman d of Rs. 5.92 Crores has been raised with the land value of Rs.2.38 Cr ores additional.			
Particulars for Green bantation	lars for Green belt/pl Area covered (in n			Ha)		
7.5 m barrier & non-m ized zone	ineral	2.923 Ha in Mine Boundary and 50m safety zone for road.			one for road.	
Baseline Data (Air / W	ater / N	loise / Soil / Hy	ydro	geological study/	Fraffic Stu	dy/ others)
Period of baseline da ta collection	Marc	March, 2021 to May, 2021				
Season (Summer / Pr e-monsoon / Post-mo nsoon / Winter)	Sumr	ner				
Predo <mark>minant Wind d</mark> irection (From)	ominant Wind d ion (From)					
Ambient Air Quelity						
(no. of locations) and				$\frac{1}{2} PM10 \qquad 38.2 - 7$		8 6 n/m3
results		PM PM		12 5	18.9 - 4	8.5 g/m3
				2	$\frac{10.7}{42 - 13}$	5 g/m3
		NC		Dx	9.6 – 19	.2 g/m3
	200					
Noise level (no. of lo	Loc	<mark>atio</mark> ns		Parameters	~?``	Results
cations) and results		10		$\begin{array}{c} \textbf{Day Eq Leq } dB(A) & 44.9-5 \end{array}$		44.9 - 52.8
		10е-р	ayı	Night Eq Leq dE	B(A)	37.2 - 43.2
Water Quality (no. o	Surfa	ce Water Oual	ity			
f locations) and resul		ocations		Parameters		Results
ts		04		pH		7.72 – 7.96
		TDS (mg/l)		136 - 148		
				Fluoride (mg/l)		0.12 - 0.2
				Chloride (mg/l)		28-32
		Fe (mg/l)		0.4 - 0.48		
		-		Dissolved Oxvgen (mg/l)		5.6 - 6.1
				Biochemical Oxygen Dem $2.4 - 2.8$		1 2.4 – 2.8
				and (mg/l)		
				-		

	Ground Water Quality		
	Locations	Parameters	Results
	8	pH	7.68 - 8.2
		TDS (mg/l)	282-346
		Fluoride (mg/l)	0.19 - 0.22
		Chloride (mg/l)	32-38
		Sulphates (mg/l)	7.8 - 9.8
		Iron (mg/l)	0.27 - 0.31
Soil Quality (no. of 1	Locations	Parameters	Results
ocations) and results	9	рН	5.6 - 6.5
		Electrical Conductivity	1.86 – 2.1
		Nitrate %	0.048 - 0.061
	a Kir	Phosphorous %	0.016 - 0.022
		Potassium %	0.066 - 0.074
Traffic study (no. of	d. prepared by Dr. Nahatnambi varadarajan (CGWA Accredited Ground W ater Professional). Pumping test was conducted in an existing bore well in th e core zone. Based on the pumping test analysis with various methods, the av erage K value obtained is 3.318m/d which is in conformity with regional aqu ifer parameters of shallow aquifer. The parameters for deeper bore wells are inferred from the lithology and an estimated value of 0.3318 m.day is used f or deeper confined aquifers. The proposed mining activity at Laserda - Pache ri Manganese and Iron ore block requires mine dewatering to an extend of 13 48.8 m3/day for safe mining. Existing one bore well will pump for 6 to 8 hours with 5 HP motor and estim ated pumping is 100 to 120 m3/day. The proposed 3 more bore wells will su pplement the ultimate domestic water demand of 380 m3/day in the project a rea. The prevailing hydrogeological conditions and predicted drawdown for t he withdrawal of ground water in the project area will have localised draw d own and more induced recharge from Karo river.		
locations) and results	be transported to Barbil and Bolani Railway Siding through Bolani-Kiriburu PWD road which is 9m width and strengthened earlier for the meant of trans portation of minerals but at present there is no such mineral transportation as no mines are operating in the nearby areas apart from SAIL Bolani and SAIL Kiriburu which has own railway sidings inside their lease area. Near Bolani r ailway siding the road is touching to the Bolani main road (11m width) whic h is further connected to Barbil siding through Bolani-Barbil Road. This roa d further connected to Barjamda-Barbil Bhadrasahi SH-10B. Further SH-10 B joined to NH-520 (4 lane) at Bhadrasahi. The nearby railway sidings are Bolani & Barbil which are at a distance of 5. 6 km and 12.0 Km (by road) respectively.While passing through Kiriburu Bo lani Road, there is a bridge over Karo River with dimensions of around 60m length and 7m width and has the strength to sustain loaded trucks/dumpers. Trucks/Volvos of the local villagers usually pass through the bridge to move towards kiriburu or Barbil. Project Proponent will construct a bridge over riv		

	er Karo having dimension of 60m length and 11m width. Permission has bee n obtained from PWD Department vide Letter No.5484 dated 13.07.2023. Br idge construction will start after obtaining EC and execution of lease deed. It is observed that 13 trips/hr for Iron ore and 1 Trip per hour for Manganese or e will be dispatched which is a maximum of 14 Trips/Hr. The road will conti nue to be in LOS 'A".				
Advertise: national d newspape	ment for PH with date (name of major aily and one regional vernacular daily r)	30.05.2023 (Odisha), 04.06.2023 (Jharkhand), R egional Newspaper - The Sambad (Odisha), The Prabhatkhabar (Jharkhand), English Newspaper - The Times of India (Odisha), The Hindustan Ti mes (Jharkhand)			
Date of Pl	H WYC	04.07.2023			
Venue	ern	Mouza-Dhanurjaypur (Khata No.122, Plot No.4/ 1238)			
Chaired b	y RI	Additional District Magistrate (Revenue), Keonj har			
Main issu	es raised during PH	Majority of the comments were related to emplo yment to the locals, proper compensation for PA Fs, Infrastructural developments, educational fac ilities, etc.			
Budg <mark>et pr</mark> ing P <mark>H ov</mark>	oposed for addressing issues raised dur er 3 years	Rs 9.63 Cr			
R & R d etails	.dThe Project Proponent reported that an area of 42.242 Ha of land needs to acquired. Abou t 25 houses need to be shifted as per the 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013' and 'the Odisha Right to F air Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016'. The State Government has granted administrative approval under rule (3) of Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules 2016 (RFCTLAR&R Rules 2016) for land acquisition and leasing out the land for mining purpose till the validity of the lease. Land acquisition process by the State Government for handing over the same to proponen t is under progress. However, in line with the guidelines given in the above rules, project proponent has worked out compensation package and a comprehensive R & R study was undertaken by Asian Institute for Sustainable Development (AISD), Ranchi, Jharkhand.Rehabilitation CostRs.39.05 Crores Periphery Development CostSupport Cost for R&R Implementation (Implementation cha rges; Administration, Management, Monitoring etc.10% of the total budget (a+b)Further, the Project Proponent submitted that for effective implementation of R & R plan as well as the Peripheral Development Plan, Project Proponent will constitute a Rehabilita tion & Resettlement Cell (R & R Cell) for the project and Corporate Social Responsibility Cell (CSRC). R & R Cell will be responsible for the effective implementation of R & R e ntitlements while CSRC will take the responsibility of peripheral development. Both will assist RPDAC in monitoring and evaluation.				

Court Case, No and its present status		present status	Project Proponent informed that there is no litigation pending against the project.	
Undertaking by Project Proponent w.r. t court case		t Proponent w.r.	Submitted	
Affida stry's 05.20	avit as per Mini OM dated 30. 18	The Project Proponent submitted the Affidavit in a Non-judicial stamp paper of Rs. 50 bearing no. D 087496 dated 20.12.2021 to comply with all the statu tory requirement & judgment of Hon'ble Supreme Court dated 2nd August 2 017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause v ersus Union of India & Ors.		
Under ect Pr A/EM	rtaking by Proj roponent in EI IP report	The Project Proponent submitted a declaration stating that they have entruste d the EIA study to M/s. Creative Engineers & Consultants (CEC), Chennai w ho have been accredited by the National Accreditation Board for Education & Training (NABET), Quality Council of India. The Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) have been pr epared as per the generic structure proposed in the EIA notification 2006, To R issued by MoEF&CC. The prescribed ToR along with compliance is also i ncorporated in the EIA/EMP Report. This report is prepared based on the info rmation and data obtained from the Mining Plan and technical studies undert aken by various consultants/institutes that have been engaged. The data given in the EIA/EMP report are factually correct to the best of knowledge.		
Under sultan report	The EIA Consultant submitted an undertaking stating that M/s Thriveni Ear hmovers Pvt. Ltd. obtained ToR under EIA Notification 2006 from MoEF& CC ToR Lr.No: J-11015/113/2021-IA II(NCM) dated 28.03.2022 for Laserd a-Pacheri Manganese and Iron Ore Block for the peak production capacity o 1.545 MTPA (ROM) of Iron ore and 0.11 MTPA (ROM) of Manganese or over an area of 131.800Ha in Dhanurjaypur, Kanarda and Laserda villages, F arbil Tehsil in Keonjhar District in Odisha. The prescribed TOR is complied with and incorporated in the EIA Report. The requirements regarding compl ance of ToR has been explained to the project proponent. This report is b sed on the information and data obtained from approved Mining Plan, site vi it & field study carried out by specialized agencies/ experts. The data genera ed and given in the EIA/EMP Report are factually correct. The sample colle tion and analyses are carried out by M/s Star Analytical Services, who are an MoEF&CC recognized and NABL accredited Laboratory.			
Plagia e	Plagiarism Certificat e The EIA Consultant submitted that the EIA Coordinator (EC) has gone t gh the report, and the consultant organization shall be fully accountable ny misleading information. It is certified that no unethical practices, plag m involved in carrying out the work and external data/ text has not been without proper acknowledgement while preparing this EIA report.		tant submitted that the EIA Coordinator (EC) has gone throu d the consultant organization shall be fully accountable for a aformation. It is certified that no unethical practices, plagiaris arrying out the work and external data/ text has not beenused acknowledgement while preparing this EIA report.	
S. No	ADS Point		Reply by Project Proponent	
1	1 The EAC opined that the Minis try may seek comments from th e Project Elephant Division in t		Project Elephant Division of the Ministry has given the foll owing Comments: i. As per the authentication of the DFO, Keonjhar the neare	
he Ministry in this regard	st elephant corridor i.e. Karo-Karampada is at a dist			
-----------------------------	--			
ne ministry in this regard.	nce of 2.31 km from the project site the user agence			
	and the State Forest Department must undertake me			
	sures for the conservation and protection of elephan			
	s and their habitats and ensure to avoid the human-			
	ephant conflict.			
	ii. Considering the migratory nature of the elephants, the u			
	er agency should take utmost care for prevention of			
	alling of wildlife including the elephants into the r			
	ning pits and should take all the necessary steps so			
	at the movement of elephants in the elephant corric			
	r/ elephant habitat is not affected by the operations			
	f the project.			
	iii. Also, while drafting the Integrated Regional Wildlife			
	onservation Plan, the elephant conservation and ma			
	agement plan should be made part of the same.			
	iv. Considering the conservation of elephants in the lands			
	ttee should regularly monitor and region the comp			
	nce of the conditions stipulated in the approval for			
	hove mentioned mines			
	v A proposed Bio-diversity Conservation Plan for this et			
S Q'	rel andscape shall also be prepared at the earliest by			
\sim \sim \sim	he State Govt. at the cost of user agency by includ			
	g the elephant conservation plan.			
	vi. While consideration of the Environment Clearance, the			
	above comments of the Project Elephant and the			
	mpliance of the conditions mentioned in the office			
Z	emorandum dated 21.12.2023of Forest Conservation			
	Division shall also be considered for the instant pro-			
5 9	osal and also for the other similar proposals related			
	o the mining in that elephant landscape.			
	Further, Ministry (Project Elephant Division) received the			
	pon the ongoing court case matter related to the project:			
	i One elephant corridor (Karo-Karampada which one out			
8 ha	f 14 elephant corridors of Odisha) is falling within			
	0 Km of impact zone of the said lease boundary.			
	ii. Wildlife Society of Odisha, a NGO has filed O.A. no.			
	9/2016/EZ before Hon'ble NGT, Kolkata bench pr			
	ing for notification of the said corridor as Eco-Sen			
	ive Zone under EPA, 1986.			
	iii. Hon'ble NGT, Kolkata in their order dated 06.04.2023			
	ave directed the state respondents to notify the ele			
	ant corridor in one-month time.			
	iv. State Government have filled W.P. (C) no. 1407 of 20			
	3 before Hon'ble High Court of Odisha against ord			
	dated 05.04.2023 of Honble NGT. v. Honble Hi Court of Odisha in its order dated 04.05.2022 in t			
	Court of Ouisna in its order dated 04.05.2023 in t			
	salu w.r. have slayed turther proceedings arising (t of $\Omega \Lambda$ no. 120/2016/EZ			
	t UI U.A. IIU. 129/2010/EZ.			
	Wildlife Headquarters Odishe information the matter is			

		b-judice and still pending b Odisha.	efore the Hon'ble	High Court of
2	The Project Proponent needs to submit a letter from the State F orest Dept., w.r.t Karo Karamp ada Elephant Corridor and also the present status of the court c ase w.r.t Karo Karampada Elep hant Corridor in WP (C) No. 1 4057/2023, 14706/2022 before Hon'ble High Court of Orrisa a nd O.A No:129/2016/EZ & Ex ecutive application no. 03/2022 before Hon'ble NGT, Case no: 115/2013 before Judicial Magis trate of First Class (JMFC) Cou rt, Barbil, Orissa and any court of law.	In this regard, the State For r w.r.t. status of the court ca or.	rest Dept. has furn ases of Karo-Kara	ished the lette impada Corrid
3	The EAC noted that there is no reference from the Project Prop onent regarding list of flora and fauna authenticated by the Stat e Forest Dept. The EAC asked the Project Proponent to submit the authenticated list of Flora and Fauna as per latest Wildlife (Pr otection) Amendment Act 202 2.	Flora and fauna list has been duly authenticated by DFO, eonjhar vide Lr.No.2044 dated 05.03.2024.		ed by DFO, K
4	The Project Proponent needs to define the exact quantity w.r.t Suggested Ore Transport Mode (SOTM) as per the Recommen dation of CSIRNEERI Report o n "Carrying Capacity Study for Environmentally Sustainable Ir on and Manganese Ore Mining Activity in Keonjh ar, Sundargarh and Mayurbhanj districts of Odisha State.	As per the SOTM recommended by CSIR-NEERI, project proponent informed that proposal comes under SOTM 3 e. EC capacity between 1 MTPA &<3 MTPA. So, project proponent will dispatch minimum 70% (Max. 1.081 MT A) by public railway siding and maximum 30% (Max. 0.4 4MTPA) by road – direct destination or by other public railway siding or above options.		EERI, project ler SOTM 3 i. A. So, project x. 1.081 MTP 0% (Max. 0.46 her public rail
5	The Project Proponent needs to submit the current status of NO C for abstraction of ground wat er	Project Proponent have obtained No Objection Certificate f or Groundwater Abstraction from CGWA vide NOC No. C GWA/NOC/MIN/ORIG/2024/19982 dated 06.03.2024. As per the Recommendation of CGWA, the quantity will be o ptimized.		
	Activities		Capital cost (Cr ores)	Recurring cos t

			(Lakhs/ann um)
Mobile Water Sprinkling		60.0	7.20
Fixed Water Sprinkling		20.0	2.70
Wheel Washing Facility		35.0	5.0
Bridge Construction over Karo River		450.0	5.0
Greenbelt and Plantation		15.0	1.5
Vacuum cleaner	C/	60.0	3.0
Dry fog system for crushing and screening plant		27.0	3.0
Continuous ambient air quality monitoring station	F	60.0	9.0
Parking Plaza for trucks with proper amenities	177 - S	25.0	2.5
Construction of cement concrete road from mine er	ntrance to exit	60.0	3.0
Effluent Treatment Plant		10.0	1.5
Sewa <mark>ge Treatment P</mark> lant		15.0	2.25
Surface Runoff Management Structures – Retaini Drain, Settling Ponds	ng Wall, Garland	110.0	7.0
Rooftop Rainwater Harvesting	f She 15	5.0	0.75
Piezometers – 2 Nos.	REEN	3.0	0.6
Electronic Display Board		3.0	0.3
Environmental Monitoring	ents	8.0	2.4
EMC Manpower		-	23.0
Awareness Programs in nearby villages		_	6.0
ISO Certification		_	3.0
Total		966	88.7
Particulars	(Rs. In Crore)		
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	Rs.19.3 Lakhs (9.66 Rs.88.7 Lakhs Recu	+ 9.64) Capital cost rring Cost	t

Project Cost	Rs.96 Crores
Employment (No.s)	335

3.4.3. Deliberations by the committee in previous meetings



Deliberations of EAC 1 :

The Project Proponent presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent informed that the instant proposal attracts the general conditions as the Odisha – Jharkhand Interstate Boundary is located at a distance of 3.19 km from the mine lease area. The EAC on viewing the KML file noted that the river Karo is passing through the mine lease area. The Project Proponent informed the EAC that a bridge will be constructed over river Karo. The EAC asked about the dimensions of the bridge. The Project Proponent informed the EAC that a bridge will be constructed over river Karo is around 60m length and 7m width and has the strength to sustain loaded trucks/dumpers. Trucks/Volvos of the local villagers usually pass through the bridge to move towards Kiriburu or Barbil. It is proposed to construct another bridge over river Karo having dimension of 60m length and 11m width and also NOC obtained from the Office of the Superintending Engineer, Keonjhar (R&B) Division vide letter dated 13.07.2023 for construction of bridge over river Karo within the mine lease area of Laserda – Pacheri Manganese and Iron Ore. Further, the Project Proponent informed the EAC that the mineral will be transported by road located adjacent to the mine lease area on the north western side to Barbil and Bolani Railway Siding through Bolani-Kiriburu PWD road. The width of the road is 11m. About maximum of 14 trips/hr will be transported from mines. There will be movement of hardly 1 rake/day from the Barbil/Bolani railway sidings.

The Project Proponent informed the EAC that the total mine lease area is 131.800 ha, out of which 94.351 ha is a forest land and 37.449 ha is a non-forest land. Stage-I Forest Clearance (FC) obtained on 21.12.2023 under Section - 2 of the Forest (Conservation) Act, 1980 in favour of M/s Thriveni Earthmovers Private Limited for non-forestry use of 94.351 ha of forest land including 4.261ha of safety zone (3.858 ha along the ML boundary and 0.403 ha along the PWD road) within the granted LoI for ML over 131.800 ha for Laserda Pacheri Manganese & Iron Ore Block. The Project Proponent also informed the EAC that there are no notified National Park, Wildlife Sanctuary, ESZ/ESA, etc., within 10 km radius of the study area. The EAC asked about the Elephant Corridor in the study area. The Project Proponent informed the EAC that as per the map authenticated by Divisional Forest Officer, Keonjhar Division, Karo Karampada Elephant Corridor is located at a distance of 2.31 km, NW.Wildlife Conservation Plan approved by PCCF(WL) &CWLW, Odisha on 11.09.2023 with a financial outlay of Rs. 390.402Lakhs. There is no movement of elephants observed in the mine lease area. The Karo Karampada Elephant Corridoris not yet notified. The EAC was of the view that if Elephant Corridors are notified as Protected Area under Wildlife (Protection) Act, 1972, the proposal that are connected with the corridors needs to be go through the Standing Committee of National Board for Wildlife (SCNBWL). The EAC opined that the Ministry may seek comments from the Project Elephant Division in the Ministry in this regard. The EAC also asked the Project Proponent to submit a letter from the State Forest Dept., w.r.t Karo Karampada Elephant Corridor and also the present status of the court case w.r.t Karo Karampada Elephant Corridor in WP (C) No. 14057/2023, 14706/2022 before Hon'ble High Court of Orrisa and O.A No: 129/2016/EZ & Executive application no. 03/2022 before Hon'ble NGT, Case no: 115/2013 before Judicial Magistrate of First Class (JMFC) Court, Barbil, Orissa and any court of law. The EAC noted that there is no reference from the Project Proponent regarding list of flora and fauna authenticated by the State Forest Dept. The EAC asked the Project Proponent to submit the authenticated list of Flora and Fauna as per latest Wildlife (Protection) Amendment Act 2022.

The Project Proponent informed the EAC that backfilling will be started from the 3rd year of mining operation on worked out Pit-1. Baseline study was carried out during March-May, 2021 (Summer Season). Predominant wind direction was from SW & W. Post projection of concentration of ambient air quality is within the NAAQS. NOC for abstraction of groundwater is under process. CSIR-CIMFR conducted a slope stability study to suggest scientific method for extraction of ore from the mine. From the tests the geotechnical parameter is found out and they are C avg.=57.27 Kpa, frictional angle avg.=7.60. From the slope stability analysis, it is determined that all the probable profiles have safety factor more than 1.3. During the plan period it is proposed to plant over 2.923 ha. of area along the Mining Lease boundary and 50 m of road safety zone in Laserda side. Advertisement for Public hearing (PH) was advertised on both States on 30.05.2023 in Odisha and 04.06.2023 in Jharkhand. PH was conducted on 04.07.2023. A budget of Rs 9.63 Cr has been earmarked to address the concerns raised during public hearing. There are 25 Project Affected Families (PAF) who will be losing their land spread over an area of 104.135 acres of land. The land will be purchased through acquisition process. Land acquisition process by the State Government for handing over the same to Project Proponent is under progress. A budget of Rs 966 Lakhs has been earmarked as a capital cost towards Environment Management Plan (EMP) and Rs 88.7Lakhs as a recurring cost. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

i. The EAC opined that the Ministry may seek comments from the Project Elephant Division in the Ministry in this regard.

ii. The Project Proponent needs to submit a letter from the State Forest Dept., w.r.t Karo Karampada Elephant Corridor and also the present status of the court case w.r.t Karo Karampada Elephant Corridor in WP (C) No. 14057/2023, 14706/2022 before Hon'ble High Court of Orrisa and O.A No: 129/2016/EZ & Executive application no. 03/2022 before Hon'ble NGT, Case no: 115/2013 before Judicial Magistrate of First Class (JMFC) Court, Barbil, Orissa and any court of law.

iii. The EAC noted that there is no reference from the Project Proponent regarding list of flora and fauna authenticated by the State Forest Dept. The EAC asked the Project Proponent to submit the authenticated list of Flora and Fauna as

per latest Wildlife (Protection) Amendment Act 2022.

iv. The Project Proponent needs to define the exact quantity w.r.t Suggested Ore Transport Mode (SOTM) as per the Recommendation of CSIR-NEERI Report on "Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State"

v. The Project Proponent needs to submit the current status of NOC for abstraction of ground water.

3.4.4. Deliberations by the EAC in current meetings

The instant proposal is for Environmental Clearance for Laserda- pacheri Manganese mining of Iron and Manganese. The Proposal attracts the general conditions as the Odisha – Jharkhand Interstate Boundary is located at a distance of 3.19 km from the mine lease area and falls under Category 'A'.

An elephant corridor i.e. Karo-Karampada is located at a distance of 2.31 km from the project site, EAC took note of the replies submitted by the PP to the ADS raised during the 26th EAC meeting held during 31st January 2024- 1st February 2024. The EAC noted the comments received from the Project Elephant Division of the Ministry and asked the PP to take measures for the conservation and protection of elephants and their habitats in order to avoid the human-elephant conflict. EAC also noted that there are multiple court cases going on w.r.t. Elephant Corridor, therefore the Project Proponent should be vigilant enough to take note of those cases and be in the compliance of the outcome of the Hon'ble court's decision.

Subsequently, the EAC stated that as per the SOTM recommendation by CSIR-NEERI, the proposal comes under SOTM 3 i.e. EC capacity between 1 MTPA &<3 MTPA. Therefore, the Project Proponent should make the transportation plan with minimum 70% (i.e. upto 1.081 MTPA) by public railway siding and maximum 30% (i.e. upto 0.464 MTPA) by road. Further, the EAC advised the PP to protect and conserve the river Karo which is passing through the mine lease area by prohibiting mining activity 50 m away from the river. The EAC also asked PP to implement the budget of Rs 9.63 Cr which has been earmarked to address the concerns raised during public hearing. EAC also took note of the implementing budget of Rs 966 lakhs which has been earmarked as a capital cost towards Environment Management Plan (EMP) and Rs 88.7 Lakhs as a recurring cost.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 9-10th May, 2024 **recommended** the proposal under the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance for Laserda - Pacheri Manganese and Iron Ore mining with production capacity of 1.545 MTPA (ROM) of Iron Ore, 1.182 MTPA of waste (Total Excavation of Iron Ore 2.728 MTPA) and 0.110 MTPA (ROM) of Manganese Ore, 0.355 MTPA of waste (Total Excavation of Manganese Ore 0.465 MTPA) along with Dry screening and crushing using 200 TPH x 2 Primary Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen in the ML area of 131.800 ha by M/s Thriveni Earthmovers Private Limited located at Villages Dhanurjaypur, Kanarda and Laserda, Tehsil Barbil, District Keonjhar, Odisha subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Environment Conditions

protection of elephant corridor The Project Proponent shall implement the measures for the conservation and protection of elephant 1. corridor in order to avoid the human-elephant conflict. sotm recommendation The Project Proponent needs to implement the SOTM recommendation by CSIR-NEERI as the proposal comes under SOTM 3 i.e. EC capacity between 1 MTPA &<3 MTPA. Therefore, the 1. Project Proponent should make the transportation plan with minimum 70% (i.e. upto 1.081 MTPA) by public railway siding and maximum 30% (i.e. upto 0.464 MTPA) by road. six-monthly report The Project Proponent needs to submit the six-monthly report upon the progressive status of 1. transportation of mineral through Rail and Road. action plan The Project Proponent shall strictly adhere to the action plan to monitor the movement of wildlife in 1. the vicinity of the mine lease area. camera traps 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 1. Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man Animal conflict. river karo The Project Proponent needs to take adequate measures for protection of the river Karo which is passing through the mine lease area. The PP needs to prohibit the mining activity up to 50 m on either side of the river Karo. The natural water bodies and other streams which are flowing in and 1. around the mine lease area should not be disturbed and mining activity shall be prohibited within 50 m from their boundaries. annual compliance The Project Proponent needs to submit the annual compliance of the effectiveness of the Wildlife 1. Conservation Plan to Ministry's Regional Office. monitoring on surface water flow Regular monitoring on surface water flow, turbidity & water quality shall be carried out and report 1. shall be submitted quarterly to the Ministry's Integrated Regional Office.

caaqms

The Project Proponent should install the 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.

monitor

 The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the lease boundary of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.

scientific study

The Project Proponent needs to conduct the scientific study for carrying out blasting by the reputed Institute within a period of six months from the start of mining operations. The ground induced blasting vibrations shall be monitored regularly for every blast performed and the values of "peak particle velocity" and "Air Over Pressure" shall be maintained below the permissible value

1. particle velocity" and "Air Over Pressure" shall be maintained below the permissible value prescribed by the DGMS, from time to time. The data needs to be maintained and submitted along with the six monthly compliance report. The implementation status of the scientific study to be carried out by the reputed Institute shall be submitted to the Ministry's Regional Office and DGMS.

water sprinklers

The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area.

garland drains

1. Garland drains and catch drains shall be regularly desilted and maintained periodically at regular intervals.

latest mining technologies

1. The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.

air pollution

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. All the screens and screeing plant should be properly covered and proper arrangement of dust suppression system should be

1. provided for dust control. 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/DG set shall be carried out at periodic intervals. Continuous noise monitoring meters shall be established inside and outside of the crusher.

7.5 m peripheral plantation

The Project Proponent needs to complete the entire 7.5 m peripheral plantation and safety barrier plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of 10 m 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.

public hearing budget

1.

The budget of Rs 963.8 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. Activity-wise details of Public Hearing Budget are as follows:

S.No.	Particulars	Budget (Rs. In Lakhs)
1.	Employment	504
2.	Drinking Water	30
3.	Road	50
4.	Electricity/Lighting	10
5.	Education	135.4
6.	Infrastructure	12.4
7.	Health	153
8.	Plantation	3
9.	Self-Employment and SHG support	44
10.	Sports	22 Ö
	Total	963.8
	Z C	13

environment management plan

The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 966 Lakh as capital cost and 88.7 lakh as recurring cost. 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 Regional Office. The item-wise details of the Environment Management Plan is as follows:

	S.No.	Item	Capital	Recurring	Timeframe
1.			Cost (Rs.	Cost (Rs.	for Capital
			in Lakhs)	InLakhs)	Cost
	1.	Mobile Water Sprinkling	60.0	7.20	1st year onwards
	2.	Fixed Water Sprinkling	20.0	2.70	1st year onwards

3.	Wheel Washing Facility	35.0	5.0	1st year onwards
4.	Bridge Construction over Karo River	450.0	5.0	6 months
5.	Greenbelt and Plantation	15.0	1.5	5 years
6.	Vacuum cleaner	60.0	3.0	1st year onwards
7.	Dry fog system for crushing and screening plant	27.0	3.0	1st year onwards
8.	Continuous ambient air quality monitoring station	60.0	9.0	1st year onwards
9.	Parking Plaza for trucks with proper amenities	25.0	2.5	1st year onwards
10.	Construction of cement concrete road from mine entrance to exit	60.0	3.0	1st year onwards
11.	Effluent Treatment Plant	10.0	1.5	1st year onwards
12.	Sewage Treatment Plant	15.0	2.25	1st year onwards
13.	Surface Runoff Management Structures – Retaining Wall, Garland Drain, Settling Ponds	110.0	7.0 -	1st year onwards
14.	Rooftop Rainwater Harvesting	nts ^{5.0}	0.75	1st year onwards
15.	Piezometers – 2 Nos.	3.0	0.6	1st year onwards
16.	Electronic Display Board	3.0	0.3	1st year onwards
17.	Environmental Monitoring	8.0	2.4	1st year onwards

	18.	EMC Manpower	-	23.0	1st year onwards	
	19.	Awareness Programs in nearby villages	-	6.0	5 years	
	20.	ISO Certification	-	3.0	5 years	
		Total	966	88.7		
					1	J
env	ironment	laboratory	(Ar		
1.	 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. 				ry for ound). nprise quality ltants.	
sin	gle us <mark>e pla</mark>	stic (sup)	1/2		D	
1.	The Pro area as complia photogr	pject Proponent shall create awareness among well as its surrounding area on the ban of ance of Notification published by MoE raphs, on the measures taken shall also be in	ong the local Single Use I F&CC on I cluded in the	people work Plastic (SUP) 12/08/2021. A six monthly c	ing within the p in order to ensu A report, along compliance repor	roject re the with t.
eleo	tric vehic	les/cng/solar	Prot			
1.	The P. vehicles	roject Proponent shall explore the possible of the possible of the second structure of the second se	ossibility of hin three year	using atlea	st 20% of E	lectric
con	duct third	l party		-roce?		
1.	The Pro one yea	oject Proponent shall conduct third party au	udit of compl MoEF&CC.	iance of EC c	ondition at an in	iterval
cen	tral groun	nd water authority (cgwa)				
1.	NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities.					
tra	nsport equ	ipment's				
1.	Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered with tarpaulin to prevent fugitive dust emission.					
re-	grass					

The mining lease holders will undertake to re-grass the mining area after ceasing of the mining operations and any other area which may have been disturbed due to their mining activities. They

1. shall restore the land to a condition which is fit for cultivation, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office within six months.

crushing/screening activity

1. The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.

court order

1. The Project Proponent shall comply with the directions passed in the matters which are sub-judice before the Hon'ble Supreme Court, High Court and NGT with regard to the elephant corridor.

periodically monitor

The Project Proponent shall 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 occupational health shall be carried out every year for mine workers. PP will also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.

3.4.6.2. Standard

1.

- 1(a)
 Mining of minerals

 statutory compliance
- 1. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated
 2. 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.

3. The State Government concerned shall ensure that mining operation shall not be commenced 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 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.

- 4. The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 5. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 6. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

7.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
8.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
air	quality monitoring and preservation
1.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
2.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
wat	er quality monitoring and preservation
wat 1.	er quality monitoring and preservation In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
wat 1. 2.	er quality monitoring and preservation In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
wat 1. 2. 3.	er quality monitoring and preservation In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MOEFCC. The monitoring of water course/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), postonos (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Autho

	shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
5.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
6.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
7.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
nois	se and vibration monitoring and prevention
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
2.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
3.	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
min	ing plan
1.	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
2.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
land	d reclamation
1.	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
2.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and

help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geomembranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

transportation

4.

No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].

The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

green belt

2.

The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole
Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

null

The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

2. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such

grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

public hearing and human health issues

Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

corporate environment responsibility (cer)

The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

miscellaneous

1.

6.

- 1. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- 2. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

4. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

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

In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and

	also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
1 0.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Proposed Dhaukan-Dhaurra-Urdaurra Iron Ore Block by M/s Pacific Iron Manufacturing Ltd. located at Niwar i,MADHYA PRADESH

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/469536/2024	J-11015/29/2024-IA.II(NCM)	17/04/2024	Mining of minerals (1(a))

3.5.2. Project Salient Features

The proposal is for Terms of Reference for Dhaukan-Dhaurra-Urdaurra Iron Ore Block with total production capacity of 46,90,419.50 TPA of R.O.M. (20,57,516.70 TPA of Iron ore & 26,32,902.80 TPA of Waste) along with installation of 500 TPH capacity of Jaw Crusher & Cone Crusher in ML area of 153.031 ha by M/s Pacific Iron Manufacturing Ltd located at Village(s) Dhaukan, Dhaurra and Urdaurra, Taluka Prithvipur, District Niwari, State Madhya Pradesh.

2. The details of the project as ascertained from the document 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 25°13'12.00"N to 25°13'42.58"N and Longitude 78°36'46.39"E to 78°38'28.49"E. The mine lease area falls under the Survey of India Toposheet No: 54 K/12 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) of Mining of Minerals. The project attracts General condition due to the presence of Orchha Wildlife Sanctuary at a distance of 2.26 Km and its Eco Sensitive Zone (ESZ) at a distance of 0.11 km from the mine area.
- iii. The project is at distance of 4.26 km from Uttar Pradesh-Madhya Pradesh Interstate Boundary in the WSW direction from the mine site and falls under Category "A" of the schedule of the EIA Notification, 2006.

iv. Details of Mine Lease:

S. N o.	Prospecting Licens e/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of th e Mineral & (Major/ Minor)	Period of Gra nt	Granted by	Mine lea se area in Ha
1.	LOI	27.07.2022	Iron Ore (Major Min eral)	50 year s	Secretary, Govt. o f Madhya Prades h, Mineral Resour	153.031

					ce Department		
Land Use/ Land Cover of the Mi	ne Le	ease Area:					
Private land						:	73.282
Government land						:	79.749
Forest land						:	00
Total Mining lease area (MLA),	ha					:	153.031
Private land for crusher, worksho	op &	other infrastr	ucture o	outside the	MLA	:	NA
Private land, ha	1			C,	9,r	:	73.282
Government land, ha						:	79.749
Forest land	A	B1	Y	ES		:	00
Total M <mark>ining lease area</mark> (MLA), I	ha	100 Ft. 20	उपते २	2.		:	153.031
Private land for crusher, worksho	op &	other infrastr	ucture o	outside the	MLA	03	NA
Mining Plan including Progress	:	Letter No.	1		Nil	S	
ed by Indian Bureau of Mines/ DMG)	てい	Date Submitted on 2			20.03.2024		
e la companya de la compa	14	Mineral & ((Major/	Minor)	Major		
		Mine Lease	Area, H	Ha	1 <mark>53.</mark> 031 Ha.		
Additional information (if any)	:	Mining Plan Office of IB nder process	n along BM, Jaba s.	with the I alpur on da	PMCP has been s ated 20.03.2024.	ubm Appr	itted to the oval is in u
Mining Parameters	:	Quantitative	e Descri	ption			
Method of Mining		Opencast M	lechaniz	zed Method	d		
Drilling/Blasting	:	Drilling: Self-Propelled Hydraulic Drill with Top Hammer Blasting: Controlled blasting will be done under the supervisio n of competent Mining Engineer following safety precautions as laid down in the Metalliferous Mines Regulation 1961					
Geological Reserves	:	4,27,06,039.8	86 MT				
Mineable Reserves	:	2,85,50,437.93 MT					
Breakup of Total Excavation (:	46,90,419.5	0 TPA	of ROM. ((20,57,516.70 TP.	A of	Iron ore &

Topsoil/ OB/ SB/ IB Rejects/ Waste, MTPA	/ Mine A)	eral		26,32,902.80 TPA of Waste)
Life of mine			:	50 Years
Mine Bench Height Width	& Bei	nch	:	Bench height will be kept 6m and width of the bench will be k ept 6m.
No. of Mine Benches			:	New pit -A=14 no's of benches, New pit -B =8 no's benches a s per First five year working proposal and end of conceptual p eriod about dhaukan block =22-25 no's benches and Dhaura U rdaura blocks =18-23 no's benches will be developed.
Existing Depth, m bgl			ž	1-6m depth
Ultimate Depth of Mi gl	ning, r	n b	:	222 mRL
Ground Water Table,	m bgl			215 mRL
Details of ground wat ction	Details of ground water interse ction		13	At the end of fifth year, mine working will confined upto 222 mRL which is 36 m below the lowest elevation i.e. 258 mRL a nd 7m above the ground water table found at 215 mRL. No water table intersection during the plan period.
Individual bench slope	e		:	880
Overall pit slope			いろう	450
Details of existing/ pr rusher	oposec	d C	// ·· .«	Proposed Jaw Crusher (500 TPH) & Cone Crusher (500 TPH)
Mineral Beneficiation				NAC GREEN
RoM output size	ance	, ,	÷	Lumps & Fines
Transportation details includin g capacity of dumper/tipper, m ode of transport and distance				Mined mineral will be transported through dumper of capacity 24 T by the road (via NH-539: 4.0 Km, NE direction).
Generation of Minera Waste & its Managen g plan period & conce od	Generation of Mineral Rejects/ Waste & its Management durin g plan period & conceptual peri od			As per the mining plan, approx. 94,10,794.80 Tonnes of Mine ral waste will be generated which, will be temporarily dumped within the mine lease boundary and further will be used for ba ckfilling of some part of excavated area.
Total water require ment		15	KLI	
Source	:	Gro	ound	l water

Permission for with drawal/ intersection along with details of grant and its validity	: NoC from CGWA will be taken and submitted during the final EIA/ EMP report.					
Particulars	Particular's Name	Distance (Km) & Direct ion				
Village	Hamirpur	0.07, SW				
Town	Prithvipur	9.63, E				
Highway	NH-539	4.0, NE				
Interstate Boundary	Uttar Pradesh-Madhya Pradesh Interstate undary	e Bo 4.26, WSW				
Railway Sta <mark>tion/Railwa</mark> line	Orchha Railway Station	19.31, North				
Water Bodies	Barda Nala	2.0, N				
Forest	Tapariyan Hararan P.F.	0.38, N				
Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/ letter is sued by the concerned Depart ment mentioning the Lr no, d ate of grant and remarks				
Forest Land within the mine lease area and (if yes) status of Forest C learance	No forest land is involved within the Mini ng Lease area.	Certificate will be submitted at the time of final EC.				
National Park	None within 15 Km radius	- OCE -				
Wildlife Sanctuary	Orchha Wildlife Sanctuary - 2.26 Km, NN	DCF certificate will be submi tted at the time of final EC				
Elephant/Tiger Reserv e	None within 15 Km radius					
Eco-Sensitive Zone (E SZ)/ Eco-Sensitive Area (E SA)	Eco Sensitive Zone (ESZ) of Orchha Wild life Sanctuary - 0.11 km, WNW	DCF certificate will be submi tted at the time of final EC				
Coastal Regulation Zo ne (CRZ)	None within 15 Km radius					
Schedule-I species (N	The proposal is for obtaining Terms of Re					

os and name of schedu le-I species with authe nticated letter)	ference. he final ted durin	e. The details will be submitted in t l EIA/ EMP Report and also presen ing the final EC presentation.			
Wildlife Conservation Plan	The pro ference. he final ted durin	posal is for ob The details w EIA/ EMP Re ng the final EC	taining Terms of Re fill be submitted in t port and also presen presentation.		
Proposed area for green plantation and no. of say s proposed	belt/ : pling	Proposed ar No. of sapli	ea for green belt: 50.5 ngs proposed: 1,26,225	Ha. 5 saplings	
Budget for green plant & ntation till the end of limine.	k pla : fe of	The proposa I be submitt uring the fir	al is for obtaining Term ed in the final EIA/ EN hal EC presentation.	as of Reference. The details wil AP Report and also presented d	
Budget for nursery	:		V r		
Details of existing plan n and its survival rate	tatio :	ARI	ELETA TA		
No. of tree cuts in the mease area and compensation	ine 1 : atory				
Partic <mark>ulars for Green</mark> be antation	lt/ pl :		Area covered	d (in Ha)	
7.5m barrier & non-min zed zone	erali :	Anc Protect	s if She is now 50.5		
R & There are a ea of 2.67 h proper safe	R & There are approx. 25 no of household within site including human settlements over an ar ea of 2.67 hectare. However, no mining activities will be carried near the settlement and proper safety boundary will be left around the settlement.				
Court Case, No and its p	present sta	tus : No	court case pending agai	inst the Project Proponent.	
Particu	Particulars (Rs. In Crore)				
Project Cost Rs.10.00 Crore					
Employment (No's)	Employment (No's) 103				

3.5.3. Deliberations by the committee in previous meetings

N/A

The instant proposal is for Terms of Reference considered at central level owing to the applicability of general condition i.e. the presence of Orchha Wildlife Sanctuary at 2.26 Km and ESZ at 0.11 km along with Interstate Boundary of UttarPradesh &Madhya Pradesh which is located at a distance of 4.26 km from the project boundary.

The PP presented the KML file and explained the existing environmental sensitive's to the EAC. The EAC noted that presence of Ken-Betwa river at distance of 4.7 Km from the project boundary and enquired whether the lease area is part of Ken-Betwa Project. The PP informed that they are not aware, the EAC asked the PP to obtain a certificate from the State Govt. stating that proposed mine lease is not a part of Ken-Betwa project. The EAC also enquired about the transportation route, PP informed that they will use the existing national highway (NH-539) to transport the ore to their existing plant. The EAC asked the PP to submit the detailed transportation route. The EAC also asked the PP to explore the possibility of setting up a Conveyor belt system upto the Railway siding. Further PP informed that approximately 25 houses exist within the ML area. Accordingly, the EAC asked the PP to conduct a detail socio-economic study of the inhabitants within the lease area. The project proponent/Consultant has not presented their presentation satisfactorily and therefore cautioned the consultant/PP to improve their presentation skill in the next EAC meeting.

Based on the above observation, the EAC **deferred** the proposal and asked to submit the requisite information:

- i. PP shall submit a certificate from the State Government stating that the lease area is not a part of Ken –Betwa Project.
- ii. PP shall explore the possibility of implementation of Conveyor belt upto the nearest Railway siding and submit the detail plan with date of completion of project.
- iii. PP shall submit the detailed socio-economic study of the inhabitants present within the lease area.
- iv. PP shall submit detail waste management plan.
- v. <u>PP shall install permanent water sprinklers instead of water tanker.</u>
- vi. <u>PP shall submit break up of project cost.</u>

3.5.5. Recommendation of EAC

Deferred for ADS

3.6. Agenda Item No 6:

3.6.1. Details of the proposal

Mining of Magnesite and Dunite (Mine Lease Area 622.29 Ha, Production Capacity 26,43,936 MTPA ROM) by S AIL REFRACTORY COMPANY LIMITED located at SALEM, TAMIL NADU						
Proposal For	e-Payme	Fresh EC				
Proposal No	File No	Submission Date	Activity (Schedule Item)			
IA/TN/MIN/465426/2024	F .No.23-166/2018-IA.III (V)	17/04/2024	Mining of minerals (1(a))			

Drects of She

CPC

3.6.2. Project Salient Features

The instant proposal is for grant of Environmental Clearance (Violation category under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) for Magnesite and Dunite mining with the Production Capacity of 26,43,936 MTPA ROM (which includes 115071 TPA Magnesite and 67104 TPA Dunite) in the ML area of 622.29 Ha of M/s SAIL Refractory Company Limited located at Village Thathaiyanagarpatti, Moongilpadi, Karuppur, Vellakkapatti, Mallamoopanpatti Taluk Omalur & Salem,

District Salem, Tamil Nadu.

ii. Details of ToR:

2. The details of the project as ascertained from the document 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: 11⁰41'19.86645'' N to 11⁰44'55.08940'' N and Longitude: 78⁰05' 10.30542'' E to 78⁰08'51.75760'' E. The mine lease area falls under the Survey of India Toposheet No: 58-I/02 and falls in Seismic Zone-III.

Date of atio	applic n	Proposal 1	No/ File No	De	Details of ToR			ute of accor d
31.01.2	2017	IA/TN/MIN/6 F.No.23-166/ V)	52144/2017 2018-IA. III(Terms of Ressued vide IIII(V) dated	eferences (To F.No.23-166/ 17.09.2021.	DR) was i 2018-IA.	1	7.09.2021
S.No.	Prospe e/ Lett LoI)/ e lease	cting Licens er of Intent (Grant of Min and Lr No		Name of the Mineral & (Major/ Mino r)	Period of Grant	Granted	by	Mine lea se area in Ha
	The N was gr Burn mpany A Goy nderta 63600 u for a years o. 853 1979, t of 62 the lea execut 1980 f f 20 yea es on 2	Aining Lease ranted to M/s Standard Co V Ltd. (BSCL, Vt. of India U king) Salem- 5, Tamil Nad a period of 20 vide G.O. N dated 05.06. over an exten 22.69 Ha and ase deed was red on 21.04. for a period o ears and expir 20.04.2000.	05.06.1979	Magnesite	20 Years	State Go of Tamil adu	vt. N	622.69
	Supple se Dee ed on or exp unite i magne	ementary Lea ed was execut 20.03.1989 f loitation of D in addition to esite.	20.03.1989	Magnesite &Dunite		State Go of Tamil adu	vt. N	622.69
	Minist ndustr Enterp de me 11.201 the Re	ry of Heavy I ies & Public orises, GoI, vi mo dated 17. 11 transferred efractory unit	17.11.2011	Magnesite &Dunite	20 Years	Ministry Heavy In stries & blic Ente rises	of idu Pu erp	622.69

S.No.	Prospecting Licens e/ Letter of Intent (LoI)/ Grant of Min e lease and Lr No	Date of Gr ant	Name of the Mineral & (Major/ Mino r)	Period of Grant	Granted by	Mine lea se area in Ha
	of M/s BSCL at Sal em with all assets, and liabilities to M/ s Steel Authority of the India Limited (SAIL). Accordingl y, M/s Steel Author ity of the India Lim ited (SAIL) owned the entire lease and Refractory Plant an d named the unit as SAIL Refractory C ompany Limited (S RCL) w.e.f. 16.12. 2011. After taking over SRCL also co ntinued mining wit h valid Consent to Operate from Tami I Nadu Pollution C ontrol Board.	e-KYC	र्थवाने स्टब्स् इत्यान स्टब्स्	CAR STH	DSS	
	Industries, Investm ent Promotion and Commerce (MMA. 1) Department, Sec retariat, Chennai - 600009, Tamil Nad u vide their letter N o 10839/MMA.1/2 O19-2 Dated: 02.1 1.2022 issued Lette r of Intent to SAIL Refractory Compan y Limited in respec t of the mining leas e granted in G.O N 0.853, dated 05.06. 1979.	02.11.2022 e-Pa	Magnesite & Dunite	Lease val id up to 2 0.04.202 9	State Govt. of Tamil N adu	622.67 h ectares

Additional information as provided by the Project Proponent is given as under:-a. The application for renewal of mining lease was made by M/s Burn Standard Company Ltd. as per norms on 14.04.1999, i.e. one year before the expiry of mining lease and mining was continued under deemed condition with valid Consent to Operate (CTO) from Tamil Nadu Pollution Control Board.

b. During the process of Transfer of lease in name of SRCL from BSCL, Government of Tamil Nadu sought for a payment of EC violation amount of Rs. 36.76 Crores in respect for G.O. No. 853. Subsequently, SRCL has paid EC violation amount of Rs. 36.76 Crores on 11.01.2022. Details of grant of Mine Lease deed execution:

S.	Details of grant of Mine I	Period of Grant			nt	Name of the	ML area		
0	a execution	From To		Millerai	(па)				
1.	Industries, Investment Pro nd Commerce (MMA.1) nt, Secretariat, Chennai Tamil Nadu vide their let 839/MMA.1/2019-2 date 022 issued Letter of Inten Refractory Company Lim spect of the mining lease n G.O No. 853, dated 05.0	02.11.2	2022	20.	04.2029	Magnesite &Dunite	622.69		
Priv	vate land	e-KYC	Nil			CAR		<u> </u>	
Gov	vernment land		622.69						
For	est land	R	Not Ap	plicabl	e				
Tota	al Mining lease area (MLA)), ha	622.69						
Priv er in	rate land for crusher, works	hop & oth LA	Not Applicable						
Min essi	in <mark>g Plan includi</mark> ng Progr ve Mine Closure Plan (ap	Letter No.	TN/SLM MDS			I/MG&DU/ROMP-1589.			
prov Mir	nes/DMG)	Date	03.08.2020						
		Mineral &	: (Major/N	Minor)	Magnesite: Major Dunite: Major				
		Mine Leas	Mine Lease Area, Ha 622.69			<mark>622.6</mark> 9 H	59 Ha		
		Validity	5 years			от —			
Min	ing Parameters	Quantitati	ve Descri	ption	5				
Met	hod of Mining	Other than	In Fully Mechanized Opencast Mining method						
Dril	Drilling/Blasting 6 m								
Geo	ological Reserves	Magnesite Dunite:16	e: 23.95 Million Tonnes 5.423 Million Tonnes						
Mir	eable Reserves	Magnesite Dunite:0.6	e: 0.745 Million Tonnes 654 Million Tonnes						
Bre	akup of Total Excavation	2643936 N	MTPA ROM						

(Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)					
Life of mine	About 10 years (Based on detailed exploration life of mine can chan ge)				
Mine Bench Height & Bench Width	6/6m				
No. of Mine Benches	NA				
Existing Depth, m bgl	NA				
Ultimate Depth of Mining, m bgl	Block II: 48m	CAR			
Ground Water Table, m bgl	Pre-Monsoon: On the basis of depth of water level of the study area, the pre monsoonal depth to water level varies from less than 25.78 to 61.12 m bgl in the study area. Post-Monsoon: On the basis of depth of water level of the study are a, the post monsoonal depth to water level varies from less than 20.0 0 to 59.14 m bgl in the study area.				
Details of ground water inter section	The Water table is found at a depth of 55m during summer and 52m (285 to 290 m RL) during rainy season. The depth of water table fluc tuation is verified by observing the water levels in the above seasons in the nearby wells. Maximum Depth of Working: 349m RL in Red Hills (Block-I) Maximum Depth of Working: 330m RL in Block-II From above it is clear that working will not intersect ground water ta ble				
Individual bench slope	60 ⁰	DEEN			
Overall pit slope	45 ⁰	roces			
Details of existing/ proposed Crusher	Not Applicable	ents e ^{-P1}			
Mineral Beneficiation	Not Applicable				
RoM output size	2643936 MTPA RC	DM			
Transportation details includi ng capacity of dumper/tippe r, mode of transport and dista nce	Within Lease After drilling blasting excavated ROM will be shifted to spoil ba by using Excavator & 15 tonne tipper combination Outside Lease The magnesite and dunite minerals from spoil bank will be trans ed to SRCL factory using hired trucks of 10 tonnes capacity.				

Generation of Topsoil/OB its Management during pla period & conceptual period	ne. Entire Overburde ed to be dumped insi						
Generation of Mineral Reje s/ Waste & its Manageme during plan period & conce ual period	ct 1 nt 1 pt	Entire Overburden/waste gene to be dumped inside the existi	erated from the ming mine lease area	ine has been planned			
Total water requirement		90 KLD	Fresh water	90 KLD			
			Treated water				
Source	e	This water will be supplied n the mining lease area.	This water will be supplied from the available bore holes present i n the mining lease area.				
Permission for withdrawal/ rsection along with details of ant and its validity	inte of gr	PP has submitted the appli Chennai for ground water w	PP has submitted the application to Water Resource Departme Chennai for ground water withdrawal.				
Particulars	Par	ticular's Name	Distance & Dir	rections			
Village	Kar	ruppur	1.22 Km in WS	1.22 Km in WSW			
Town	Sale (Ble	em - Block (Block 1-3) ock 4)	10 km in SE 6 Km in SE	SS			
Highway	NH	7/NH 44	Block Block- (1-3) Block 4	Distance & D irection 2 Km, SW 800 m, NE			
Interstate Boundary	Noi	ne within 10 km radius	- in				
Railway Station/Railway line	Sale	em Railway station	3 Km				
Water Bodies	Sar Riv	bangaNadiTirumanaimuttar er	7 Km in W 2.5 in E				
Forest	Naş Kun Kan Kan Kan Ma San Attu Kan	garmalai RF mubalpatti RF njeri RF njamali RF oputu RF ryland RF nyasi Malai urGhat Extension urGhat njeri Extension	1.1K in E 100 m in NE 6.7Km in N 3.2Km in N 6.8 Km in SW 4.8 km in E 9.6 in NE 9.0 in NE 9.2 Km in N 9.2 Km in N 9.3 Km in N				

Forest Land/ Protected Area/ Enviro nmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the co ncerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease ar ea and (if yes) status of Forest Clear ance	No	None within 10 km radius
National Park	No	None within 10 km radius
Wildlife Sanctuary	No	None within 10 km radius
Elephant/Tiger Reserve	No	None within 10 km radius
Eco-Sensitive Zone(ESZ) /Eco-Sens itive Area (ESA)	No	None within 10 km radius
Coastal Regulation Zone (CRZ)	No	None within 10 km radius
Schedule-I Species (No.s and name of schedule-I Species with authentic ated letter)	Yes Payment	 Gaur (Bosgaurus), Bonnet macaque (Macacaradiata) Jungle cat (Felischauskelaarti) Small Indian civet (Viverriculaindica) Sambar (Rusa unicolor) Golden jackal (Canis aureus) Sloth bear (Melursusursinus) Honey badger (Mellivoracapensis) Indian Porcupine (Hystrixindica) South-Eastern langur (Semnopithecusp riam) Indian chevrotain (Moschiolaindica) Rusty-spotted cat (Prionailurusrubigin osus) Asian palm civet (Paradoxurushermap hroditus) Bengal fox (Vulpesbengalensis) Indian Pangolin (Maniscrassicaudata) Indian muntjak (Muntiacusmuntjak) Gray slender loris (Loris lydekkerianu s) Russell's viper (Daboiarusselii) Indian Python (Python molurus) Common krait (Bungaruscaeruleus)
Wildlife Conservation Plan	Yes	Schedule-I Species are present in the study area, for which a Conservation Plan for an amount of Rs 43.30 Lakhs has been prepar ed. The Conservation Plan has been approv ed by O/o PCCF, Chennai vide letter Ref N

	61/2023 dated 09.08.2023.				
Proposed area for green belt/plantation and no. of saplings proposed			Area: 16.63 Ha. No. of Saplings: 41581		
Budget for green plant & plantation till the end of life of mine.			153 Lakhs		
Details of existing plantation and its survival rate	Area for Green belt: 58.26 H a Survival Rate: 95%				
No. of tree cuts in the mine lease area and compenn	Not Applicable				
Baseline Data (Air / Water / Noise / Soil / Hydro g	<mark>ge</mark> ologi	cal study/ Tra	ffic Study/ others)		
Period of baseline data collection	Ma	rch to May 20	21		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Pre	Pre-Monsoon			
Predominant Wind direction (From)	Nor	theast (NE)			
Ambient Air Quality (8) and results PM 10 - PM 2.5- SO2- 13 NO _x - 2 CO - 0.			PM $_{10}$ - 74.10 to 80.74 µg/m ³ PM $_{2.5}$ - 36.76 to 43.97 µg/m ³ SO ₂ - 13.42 µg/m ³ to 8.7 µg/m ³ NO _x - 23.01 µg/m ³ to 16.66 µg/m ³ CO - 0.7 to 0.9 mg/m ³		
Noise level (8 locations) and resultsThe Leq values at this location for datime was observed to be 71.9 and 63 spectively, which can be attributed to ailing environment (Mining, industrisiding and Highway). However, the ise levels were found to be within the limits (75 dB (A))			t this location for day and night d to be 71.9 and 63.0 dB (A) re can be attributed to local prev nt (Mining, industrial, Railway vay). However, the recorded no und to be within the mining zo A))		
Water Quality (8 locations) and results	er Quality (8 locations) and results Ground Water: All the Parameters Like p ies from 7.42 to 7.77, Total Hardness var m 308.45 to 378.46 mg/l., Total Dissolved s varies from 562 to 697 mg/l, Chlorides 8 o 115.23 mg/L etc. are found within the p ible limits. Bacteriological studies revealed bsence of Total coliform. Surface Water: All the Parameters Like p ies from 7.47 to 7.8, Total Hardness varies 641 to 740.82 mg/l, Total Dissolved Solids s from 818 to 1048 mg/l, Dissolved Oxyge 1 mg/l to 6.5 mg/l etc. are found within the issible limits. Total Coliform count is me 900 to 1600 MPN/100ml.				

Soil Quality (8 locations) and results		pH- 7.58 to 7.76 Organic matter- 0.31% to 0.7% Electrical Conductance - 0.26 § /cm to 0.364 m S/cm Available Nitrogen - 126 Kg/ha to 247 Kg/ha Available Phosphorous - 9.86 kg/ha to 18.11 K g/ha Available Potassium - 107.59 Kg/ha to 225 Kg ha		
Traffic study (one locations) and results		The proposed project will not cause major impa cts due to increase in the PCU/Day which is 366 PCU/day. The LOS study shows that the existin g traffic scenario is "Good" and the free flow of vehicles is observed during the study period. Du e to the mine project the traffic density will incr ease and the value of LOS will not change.		
Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)		The Indian Express Dated: 19.05.2023 DhinaThanthi Dated: 19.05.2023		
Date of PH		04.07.2023		
Venue		M/s Rajam Thirumana Mandapam, Indhira Naga r, near Rajam Hospital, Karuppur Village, Omal ur Taluk, Salem District		
Chaired by		Shree S. Karmegam, I.A.S, District Collector, Sa lem		
Main issues raised during PH	PC G	Employment opportunities for locals Health facilities to be provided Massive afforestation Mining will be done as per statutory norms		
Budget proposed for addressing issues ing PH over 3 years	raised dur	5 Lakhs for a period of five year		
Particulars	Details of	f Letter along with date of grant and validity		
Consent to Operate Last renew der no.410 Last renew order no.6 PP have in revoked v ated 19.07		wal of consent under Air Act was obtained vide or 03 dated 29.05.2013 valid till 31.03.2014 wal of consent under Water Act was obtained vide 5484 dated 29.05.2013 valid till 31.03.2014. nformed that Order no 4103 dated 29.05.2013 was ride Proc. No T7/TNPCB/F-0950/RL/SLM/2013 D 7.2017		
Certified Production Details from the inception of the mine (in tabular form s been ope		ect has violated the EIA notification as the mine hat reating without Environmental Clearance since the		

against the EC capacity)	in r e m T er o c.	aception of min 2000, which is was operated b il Nadu Polluti he details of pa nt of Geology a Roc.45/2018/ 333/2017/ Min Annual I	ing lease and during rem violation of EIA notifica- based on Consent to Ope ion Control Board since ast production are auther and Mining, Salem, Tam Mines A/Mag-1 on date les A on dated 08.05.201 Production from 1993-94	newal of lease in yea ation 2006. The min erate (CTO) from Ta 1991. Inticated by Departm il Nadu vide letter n id 1.11.2018 and Ro 17. 4 to 2016-17
		Year	Magnesite (TPA)	Dunite (TPA)
		1993-1994	62000	13929
		1994-1995	61000	7000
	375	1995-1 <mark>9</mark> 96	46000	14000
	e-*`	<u>1996-1</u> 997	50000	7000
		1997-1998	58000	5500
		1998-1999	57000	5500
		1999-2000	48000	4250
		2000-2001	39500	9000
		2001-2002	35900	9000
×		2002-2003	32500	11000
\sim		2003-2004	61000	16000
		2004-2003	69000	20000
		2005-2000	68000	33000
		2007-2008	89000	23000
	3	2008-2009	135000	28000
		2009-2010	64100	22000
		2010-2011	85000	30000
		2011-2012	68960	37870
		2012-2013	80000	23000
		2013-2014	75000	15000
		2014-2015	65000	13600
	·@ []	2015-2016	58000	12800
		2016-2017	42000	1500
R & R details	9	The Project h	as submitted that no R&	R issues involved.
Court Case, No and it s present status				
Undertaking by Proje F ct Proponent w.r.t cou to rt case	PP has submitted ed 27.04.2024 sta	an affidavit in ating that SRC	Rs. 100 non judicial sta L is a party in two cases	mp (DR 120414) da as stated above.
Affidavit as per Ministry's 05.2018	SOM dated 30.	PP has subm mp (DR 1204 inistry's OM	itted an affidavit on Rs. 414) dated 27.04.2024 in dated 30.05.2018.	100 non judicial sta accordance with M

Undertaking by Project Proponent in EI A/EMP report	PP has submitted an undertaking dated 27.04.2024 statin g that in case any deviation in data found in any of the d ocuments, the authorized signatory shall be held responsi ble and furthermore, the above said project shall be rejec ted for grant of amendment in EC.			
Undertaking by Consultant in EIA/EMP report	P The consultant has submitted and undertaking in its let head dated 27.04.2024 stating that contents in the form f information and data of the EIA Report has been prej ed by them and are factually correct and not copied fro any other EIA Reports.			
Plagiarism Certificate	iarism Certificate PP has submitted Plagiarism certificate (Plagiarism ker-X-Report) dated 25.04.2024.			
Sl. No. Descr	ription	Estimated cost		
R	IVE C			
	र रधाति एक			
Activities	Capital Cost (Crores)	Recurring Cost (Lakhs/Annum)		
Air Pollution Control Measures	0.60	3.0		
Water Pollution Control Measures	0.32	10.0		
Noise Pollution Control Measures		3.0		
Greenbelt Development	Cots of \$1.0395	4.0		
Rain Water Harvesting	C C R 0.05	1.0		
Fire Fighting and Safety measures	0.03	24.0		
Total	2.0395 45			
Total EMP Budget	248.95 L	akhs		
Particulars	(Rs. In Crore)			
Total cost of EMP (Capital Cost of EMP + capita	l cost of Public hearing)	2.4895		
Project Cost		3.0		
Employment (No.s)		600 persons		

3.6.4. Deliberations by the EAC in current meetings

The instant proposal is for Environmental Clearance under violation category as per Ministry's Notification vide S.O. 804 (E) dated 14.03.2017. The project Proponent has informed to the Committee that the mining activity was suspended since 10.01.2017.

The EAC noted that the baseline data submitted by PP is from March to May, 2021. EAC was of the opinion that the presented dataset is not good enough to represent the current scenario, accordingly, EAC requested to project proponent to collect fresh baseline data over a period of one month to validate the existing data. The EAC also enquired about the availability of the SEIAA approved DSR for the minor mineral Dunite. PP stated that they are not aware at present and they will submit the same. EAC also asked the PP regarding the status of consent to operate. PP informed that their consent was valid till 31.03.2014. EAC enquired whether any action has been taken by SPCB since the PP operated the mine without consent till 10.01.2017. PP informed that no action has been taken by SPCB with regard to the operation of mine after the expiry of CTO.

Further, while appraising the remediation plan, CRAP and NRAP, the EAC noted that PP has not taken a holistic approach to assess the damages caused by it to the environment. EAC also noted that the PP has incorporated certain aspects of public hearing into its community resource augmentation plan (viz sports facility, employment, skill development etc), accordingly, EAC advised the PP to rectify the same. EAC also mentioned that PP should include the damages caused due to point/line sources and its effect on the existing fauna/environment (land, water, air) in its remediation plan. EAC also reiterated that PP should specifically define the parameters in its remediation plan, CRAP and NRAP. With regard to the EMP presented by PP, EAC observed that recurring cost has not been included. EAC also observed that the budget of proposed plantation is inadequate and asked the PP to put forward a realistic and practical budget for implementation of the same. The EAC opined that the PP, while revising the damage assessment shall include the parameter of damages with respect to the receptors. The EAC was of the opinion, that PP shall revise the above said items and come up with a tangible action plan that can be monitored by the Regional office of the Ministry. Based on the above, the EAC **deferred** the proposal for the want of following information: -

- i. The Project Proponent needs to collect fresh One-Month Baseline data (Preferably non-monsoon) to validate the existing dataset.
- ii. The Project Proponent needs to submit the SEIAA approved DSR for Dunite.
- iii. PP shall submit the Chronology of Mine lease from the inception of Mine.
- iv. PP needs to submit the detailed transportation plan including the route that it proposes to use for transportation. PP shall show the proposed route on KML.
- v. PP shall explore the possibility of using conveyor belt transportation system upto the nearest Railway siding.
- vi. PP needs to record the drone video of the complete Mine lease area showing the Mine pit, overburden, and plantation and existing transportation.
- vii. PP shall submit the revised remediation plan, CRAP and NRAP taking into consideration of all the factors as pointed out by EAC.
- viii. PP should also include the cost of damage due to transportation of mineral within the violation period due to mineral transportation upon the existing tree and road.
- ix. PP should recalculate and submit the revised EMP cost and Public Hearing Cost after associating the activities from Remediation Plan, NRAP and CRAP.
- x. PP needs to submit the detailed breakup of the health facilities that shall be provided to mine worker and local villagers
- xi. PP shall submit the revised budget for plantation.
- xii. PP needs to submit the detail management plan for mineral rejects and inter-burden.
- xiii. The Project Proponent needs to submit water withdrawal permission from CGWA.

<u>PP should not carry out secondary blasting, instead possibility of introducing rock breaker should be explored to break oversized boulders.</u>

3.6.5. Recommendation of EAC

Deferred for ADS

Day 2 -10/05/2024

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Validity Extension of Environment Clearance Letter no. J-11015/243/2008-IA.II (M) for Petnikota Limestone Mi ne (ML Area 912.797 ha) with Existing Limestone Production Capacity of 4.0 Million TPA located at Village: Pet nikota, Mandal: Kolimigundla, District: Nandyal, Andhra Pradesh. by KOYYA REDDY located at NANDYAL,A NDHRA PRADESH

Proposal For	e-Krc	Application for Validity Extension of EC- Form-6		
Proposal No	File No	Submission Date	Activity (Schedule Item)	
IA/AP/MIN/467299/2024	J- 11015/243/2008-IA.II (M)	27/03/2024	Mining of minerals (1(a))	

3.1.2. Project Salient Features

2.7.1 The proposal for extension of validity of EC and its amendment vide dated 14.11.2009 & 20.11.2023 for Petnikota Limestone Mine with production capacity of 4.0 MTPA in the ML area of 912.797 ha by M/s. UltraTech Cement Ltd. located at Village Petnikota, Mandal Kolimigundla, District Nandyal, Andhra Pradesh was submitted on Parivesh portal on 27.03.2024.

2.7.2 The details of the project as ascertained from the document submitted by the Project Proponent as given under: -

- i. The Project Proponent has requested to extend the validity of EC from 26.04.2024 till Mine Lease Validity i.e., 26.04.2054 of Environmental Clearance (EC) vide letter No J-11015/243/2008-IA. II (M) dated 14.11.2009 & 20.11.2023 as per MoEF&CC Notification S.O. 1807(E) dated 12.04.2022 of Petnikota Limestone Mine (ML Area 912.797 ha) with Existing Limestone Production Capacity of 4.0 MTPA located at Village Petnikota, Mandal Kolimigundla, District Nandyal, Andhra Pradesh.
- ii. The Project Proponent vide letter dated 11.09.2023 requested to the state government of Andhra Pradesh for extending the lease period from 26.04.2024 to 26.04.2054 under section 8A (5) of MMDR Act 1957.
- iii. MoEF&CC Notification S.O. 1807(E) dated 12.04.2022 Para IV mentioned that, "The prior Environmental Clearance granted for mining projects shall be valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier".
- iv. The Project Proponent has submitted Mining Plan with Progressive Mine Closure Plan has been approved over an area of 912.797 ha by IBM on 19.12.2023 for the period of 2024-25 to 2028-29.
- v. Details of Mine Lease:

S. N o.	Prospecting License/Letter of Inten t (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Mino r)	Perio d of G rant	Granted by	Mine le ase area in Ha
1.	PL was granted vide no. G.O.Ms. No, 252 to M/s. Grasim Industries	03.05. 2000	Limestone	2 yea rs	Govt. of Andhra	1357.08 8

	Limited					Pradesh	
2.	The Mining Lease was Granted vid e order no. G.O.MS.No.222 in favo ur of M/s. Grasim Industries Limite d		22.07. 2003	Limestone	20 y ears	Govt. of Andhra Pradesh	f 951.848 ha
3.	Revised extent vide Order G.O.Ms. No. 88 in favour of M/s. Grasim In dustries Limited		27.12. 2022	Limestone	-	Govt. of Andhra Pradesh	f 912.797 ha
4.	Transfer of ML in the Name of aTech Cement Limited vide of G.O.Ms.No.89	f Ultr order 27.12. 2022		Limestone	1	Govt. of Andhra Pradesh	f 912.797 ha
5.	Transfer deed Registered & Ex ed	ecut 23.01. Limestone		Limestone	- -	Govt. of Andhra Pradesh	f 912.797 ha
S. N	Details of grant of Mine Leas	Period of From		of Grant	Name	of the	Mine lease
0.	e deed execution	S.E.	From	То	- Mii	neral	area in Ha
1.	Mine lease has been executed and registered on 27.04.2004 for 20 years	27.	From 04.2004	To 26.04.2024	Lime	estone	area in Ha 951.848 ha
1. 2.	Mine lease has been executed and registered on 27.04.2004 for 20 years Revised extent vide Order G. O.Ms. No. 88 in favour of M/ s. Grasim Industries Limited	27.	From 04.2004 12.2022	To 26.04.2024 26.04.2024	Lime	estone estone	area in Ha 951.848 ha 912.797 ha
3. 1. 2. 3.	e deed execution Mine lease has been executed and registered on 27.04.2004 for 20 years Revised extent vide Order G. O.Ms. No. 88 in favour of M/ s. Grasim Industries Limited Transfer of ML in the Name of UltraTech Cement Limited vide order G.O.Ms.No.89	27. 27. 27.	From 04.2004 12.2022 12.2022	To 26.04.2024 26.04.2024 26.04.2024 26.04.2024	Lime	estone estone	area in Ha 951.848 ha 912.797 ha 912.797 ha

vi. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Consent to Establish	Consent For Establishment for 4.0 Million TPA Limestone has been obtaine d from Andhra Pradesh Pollution Control board vide Consent Order No. 14 1/PCB/CFE/RO-KNL/HO/2009-570 dated 31.05.2010.
Consent to Operate	Consent for Operations for 4.0 Million TPA Limestone has been obtained fr om Andhra Pradesh Pollution Control board vide Consent Order No. PPCB/ KNL/KNL17406/CFO/HO/ 2014-338 dated 25.04.2014. Consent for Operations Consent Order No. 322614/APPCB/ KNL/KNL174 06/CFO/HO/2022 Dated 23.11.2022 valid upto 31.03.2024. CFO Renewal a

	pplication was submitted to APPCB before expire of the existing CFO valid ity.
Certified Compliance Report and Inspection date	Compliance Report Certified by RO Vijayawada on 17.10.2023 & date of in spection 11.10.2023.
Certified Production Details from the ince ption of the mine (in t abular form against th e EC capacity)	DMG Certified production figures from the inception of mine has been sub mitted by the Project Proponent.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

2.7.3 The Committee after detail deliberations noted that the instant proposal is extension of validity of EC from 26.04.2024 to 26.04.2054. Earlier, the EC was issued on 20.11.2023 for validity upto 26.04.2024. The PP has requested to the Director of Mines and Geology, Andhra Pradesh for extending the lease period upto 26.04.2054, while the Director of Mines and Geology, Andhra Pradesh stated that the deemed extension of mining lease is under active consideration and orders will be issued. Therefore, the Committee emphasized to submit a certificate from the State government stating the validity of ML extended upto 26.04.2054.

In view of the above, the Committee **deferred** the proposal for submission of following requisite information:

- i. The PP needs to submit a certificate from the State government stating the validity of ML extended upto 26.04.2054.
- ii. The PP needs to submit the activity-wise detail expenditure status of Public Hearing.

3.1.5. Recommendation of EAC

Deferred for ADS

3.2. Agenda Item No 2:

*-Payments

3.2.1. Details of the proposal

"Brishyrnot Limestone Deposit-II" with proposed maximum production capacity of 3.2 MTPA (3.0 MTPA limes tone & 0.2 MTPA shale) by Star Cement Meghalaya Limited. by STAR CEMENT MEGHALAYA LIMITED loc ated at EAST JAINTIA HILLS, MEGHALAYA

Proposal For		Fresh ToR		
Proposal No	File No	Submission Date	Activity (Schedule Item)	
IA/ML/MIN/456863/2023	IA-J-11015/17/2019-IA-II(N	30/12/2023	Mining of minerals (1(a))	
CM)				
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3.2.2. Project Salient Features

The instant proposal is for Terms of Reference for Brishyrnot Limestone Deposit-II of M/s Star Cement Meghalaya Limited with proposed maximum production capacity of 3.2 MTPA (Limestone: 3.0 MTPA & Shale: 0.2 MTPA), 0.38 MTPA of Waste/OB including Soil (Total excavation: 3.58 MTPA) in the mine lease area of 65 ha, located at Village: Brishyrnot, Tehsil: Khliehriat, District: East Jaintia Hills, Meghalaya.

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

- i. The project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the general conditions as Narpuh Wildlife Sanctuary boundary is located at a distance of 1342 m, SE direction and it's ESZ boundary at a distance of 25.29 m, SE to the project site and falls under Category "A" of the schedule of the EIA Notification, 2006 and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 25°09'51.010"N to 25°10' 18.600" N and Longitude:92°25' 09.717 "E to 92°25' 55.894"E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 (Restricted)and falls in Seismic Zone V.

iii. Details of Mine Lease:

S.No	Prospecting License/ Letter of Intent (Lo I)/ Grant of Mine lea se and Lr No	Date of the gra nt	Name of t he Mineral & (Major/ Minor)	Per iod of Gr ant	Granted by	Mine lease area i n Ha
1	Prospecting License- MG.8/2023/36	Granted on 12/ 04/2023/and e xecuted on 08/ 05/2023	Limestone & Shale (Major)	3 y ear s	Mining & Geolo gy Department Government of Meghalaya	65 h a.
2	Letter of Intent/autho rization order- MG.8/ 2023/376	22.09.2023	Limestone & Shale (Major)	3 y ear s	Mining & Geolo gy Department, Government of Meghalaya	65 h a.
iv. Land	Use/Land Cover of the M	Ine Lease Area:				
Private	e land					65 h a.

Government land	Nil
Forest land	Nil
Total Mining lease area (MLA), ha	65 h a.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

v. Mining plan details:

	Letter No.	MCDR-MPCP0CaFl/11/2023-GU H-IBM_RO_GUH	
e.	Date	05.02.2024	
Mining Plan(approved by Indian Bureau of Mines/DMG)	Mineral (Major/Minor)	Major	
No.	Mine Lease Area, Ha	65	
	Validity	5 year from the date of execution of mining lease	
Mining Parameters	Quantitative Description		
Method of Mining	Opencast mechanized mining using HEMM		
Drilling/Blasting	Deep hole drilling & blasting.		
Geological Reserves	138.15 million tons of Limestone and 0.861 million to of shale		
Mineable Reserves	111.20 million tons of Limestone and 0.698 million tons of shale		
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Reje cts/Waste, MTPA)	3.58 MTPA (including 3.0 MTPA of limestone, 0.2 MTPA of shale, 0.38 MTPA of waste/OB including so l).		
Life of mine	The life of mine is estimated at about 38 years consider g the mineable reserves based on present exploration.		
Mine Bench Height & Bench Wi dth	The height of the bench will be 9 m and a minimum wo king width of the benches in minerals will be 20 m for s		

	fe operation of mining machinery.
No. of Mine Benches	24
Existing Depth, m bgl	NA, as it is a green field project
Ultimate Depth of Mining, m RL	70
Ground Water Table, m RL	55
Details of ground water intersecti on	Water table will not be intersected as it is at 55 mRL and mining will be done up to 70 mRL.
Individual bench slope	85° from horizontal
Overall pit slope	<45°
Details of existing/ proposed Crusher	No crushing and screening plant is proposed in the mine. Limestone & shale will be transported to cement plant cr usher of 1200 TPH capacity.
Mineral Beneficiation	NA
RoM output size	-1000 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance.	The material after blasting will be loaded by hydraulic ex cavators of about 2.6 m3 bucket capacity into tippers of 25 tons carrying capacity for its transportation to crusher and waste dump yards.
Generation of Topsoil/OB & its Management during plan period & conceptual period	Max. 0.28 MTPA of waste & 0.1 MTPA of soil will be g enerated. Waste/OB will be dumped at earmarked places. The soil generated will be used extensively for plantatio n. About 3.332 million tons of Waste and 0.245 million ton s of soil will be generated upto the life of mine. Waste wi ll be stacked separately in the temporary dump. The entir e waste will be used in the cement plant as blending mate rial after taking the permission from the government.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	There will be no rejection from the mine.

Total water requirement	45 KLD	Fresh water		05 KLD
		Treated water	r	40 KLD
Source	Total water requirement for the d 45 KLD which will be source the company's cement plant.		proposed mine wi	ll be aroun nkers from
Permission	Vide Letter No. AID (J) 223 / 2008-09/971 dated 16th June 2 009.			6th June 2
Additional information(if an y)	Total water requirement for the proposed mine will be aroun d 45 KLD, out of which 40 KLD will be STP treated water a nd 5 KLD will be fresh water for domestic purposes.			ll be aroun red water a rs.
/ii. Nearest vill <mark>age / town/</mark> highv	vay/railway station	/ water bodies		
Particulars	Particular's Name		Distance & Direc	tions
Village	Brishyrnot	विति रुश्हि	0.16 Km South	
Town	Khliehriat		21.20 Km N	
Highway	NH-6		2.53 km WNW	
Interstate Boundary	Meghalaya-Assam State Boun dary India-Bangladesh Internationa l Boundary		8.15 km SE 12.50 Km SW	20
Railway station	Hilara railway station		70 km (by road)	
Water bodies	Um lunar Lukha River Lubha River Um Talang Um Sangat Um Sangat Um Ronsong Um Badoh DongtangleNala KukhaNala PongkoloNadi AphaNala ThangpyrshaidNala KhunngoiNala Sakha Nala		0.07 Km East 1.23 Km SE 1.23 Km SE 1.23 Km SE 3.60 km SW 4.46 Km N 4.48 Km ESE 5.74 Km WNW 6.13 Km N 6.57 Km NNW 7.07 Km ESE 7.72 Km SSE 7.81 Km NW 8.46 Km ESE 8.61 Km NW	

Forest	Singlei River RaphingdungNala LunthangtangNala Who ThaniangNala Narpuh Reserve Forest Bloc k I		8.98 Km ESE 9.33 Km NE 9.86 Km SSE 9.93 Km NNW 8.82 km SW
viii. Presence of Environmenta	lly Sensitiv	ve areas in the study area	1
Forest Land/Protected Are a/Environmental Sensitivit y Zone	Yes/N o	Details of Certificate/I Department mentionin remarks	letter issued by the concerned of the Lr no, date of grant and
Forest land within the min e lease area and (if yes) statu s of Forest Clearance	No	Not Applicable	
National Park	No	Not Applicable	
Wildl <mark>ife Sanctuary</mark>	Yes	Narpuh Wildlife Sanct	uary - 1342 m SE
Eco-Sensitive Zone(ESZ) / Eco- Sensitive Area(ESA)	Yes	Narpuh Wildlife Sanct	uary ESZ -25.29 m SE
Coastal Regulation Zone (CRZ)	No	Not Applicable	551500
Schedule-I species (No.s a nd name of schedule-I species with authenticated letter)	Yes	There are ten Schedule zone are given below: Hoolockhoolock (Wes busbengalensis (Slow (Leopard Cat), Pythom n), Neofelisnebulosa (C ornis (Great Pied Horr dian Wolf), Manispent ursinus (Sloth bear) ar r (Himalayan serow).	e I Species found in the buffer tern hoolock gibbon), Nyctice loris), Prionailurusbengalensis molurus (Indian Rock Pytho Clouded Leopard), Bucerosbic abill), Canis lupus pallipes (In cadactyla (Pangolin), Melursus and Capricornissumatraensistha
Wildlife Conservation Pla n	Yes	The Chief Wildlife wa tries and Government Regional Conservation	rden had a meeting with Indus departments for preparation of a plan for the East Jaintia Hills

district under the supervision and guidance of CWL W, Meghalaya and the cost for preparation and implementation of the Regional Conservation Plan may be shared by various project proponents on a proport ionate basis keeping in view the likely impacts of each project on the wild life and their habitat. Project proponent also confirmed that they shall be part of the eregional conservation plan and will pay the fee as idetermined for project.x. Green belt/plantation detailsAt the end of life of mine, out of the total 65 ha area, 52.52 ha mined out benches will be rehabilitated by plantation/grassification, 2.71 ha. along the 7.5 m wide peripheral boundary and 0.36 ha undisturbed area will be developed to green belt.Budget for green plant & plantation till the end ofRs 2.91 CrBudget for unreseryNADetails of existing planta tion and its survival rateNA as it is greenfield projectNo. of tree cuts in the mine release area and compo release area and compo rel		
x. Green belt/plantation details: Proposed area for green belt/plantation At the end of life of mine, out of the total 65 ha area, 52.52 ha mined out benches will be rehabilitated by plantation/grassification, 2.71 ha. along the 7.5 m wide peripheral boundary and 0.36 ha undisturbed area will be developed to green belt. Budget for green plant & plantation till the end of life of mine. Rs 2.91 Cr Budget for nursery NA Details of existing plantation at its survival rate NA as it is greenfield project No. of tree cuts in the mine lease area and compensatory afforestation 150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period. Particulars for Green belt Area covered (in Ha) 7.5 m barrier & non-mine ratized zone 2.71 Ha Baseline detail: Baseline data collection Baseline data collection March to May 2023 Season (Summer / Pre-monsoon / Post - monsoon / Winter) Summer Season Predominant Wind direction (From) Towards East		district under the supervision and guidance of CWL W, Meghalaya and the cost for preparation and impl ementation of the Regional Conservation Plan may be shared by various project proponents on a proport ionate basis keeping in view the likely impacts of ea ch project on the wild life and their habitat. Project p roponent also confirmed that they shall be part of th e regional conservation plan and will pay the fee as determined for project.
Proposed area for green belt/plantationAt the end of life of mine, out of the total 65 ha area, 52.52 ha mi ned out benches will be rehabilitated by plantation/grassification, 2.71 ha. along the 7.5 m wide peripheral boundary and 0.36 ha u ndisturbed area will be developed to green belt.Budget for green plant & plantation till the end of life of mine.Rs 2.91 CrBudget for nurseryNADetails of existing planta tion and its survival rateNA as it is greenfield projectNo. of tree cuts in the mi ne lease area and compe nsatory afforestation150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period.Particulars for Green beltArea cover (in Ha)7.5 m barrier & non-min eralized zone2.71 Ha e-PaymentsBaseline Data (Air / Water / Noise / SUI / Hydro geological study/ Traffic Study/othersPeriod of baseline data cover / market monsoon / Winter)March to May 2023Season (Summer / Pre-morson / Pros t monsoon / Winter)Summer SeasonPredominant Wind direct/ From)Towards East	x. Green belt/plantation deta	ils:
Budget for green plant & plantation till the end of life of mine.Rs 2.91 CrBudget for nurseryNADetails of existing planta tion and its survival rateNA as it is greenfield projectNo. of tree cuts in the min ne lease area and compe nsatory afforestation150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period.Particulars for Green bel t/plantationArea cover (in Ha)7.5 m barrier & non-min eralized zone2.71 HaParticulars for Green bel t/plantation2.71 HaParticulars for Green bel t/plantationMarch to May 2023C. Baseline Data (Air / Water / Noise / Summer Season t monsoon / Winter)March to May 2023Season (Summer / Pre-monsoon / Pos t monsoon / Winter)Summer SeasonPredominant Wind directiv (From)Towards East	Proposed area for green belt/plantation	At the end of life of mine, out of the total 65 ha area, 52.52 ha mined out benches will be rehabilitated by plantation/grassification, 2.71 ha. along the 7.5 m wide peripheral boundary and 0.36 ha undisturbed area will be developed to green belt.
Budget for nurseryNADetails of existing planta tion and its survival rateNA as it is greenfield projectNo. of tree cuts in the min ne lease area and compe nsatory afforestation150 trees will be cut in the mine lease. 	Budget for green plant & plantation till the end of life of mine.	Rs 2.91 Cr
Details of existing planta tion and its survival rateNA as it is greenfield projectNo. of tree cuts in the min ne lease area and compensatory afforestation150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period.Particulars for Green bel t/plantationArea covered (in Ha)7.5 m barrier & non-min eralized zone2.71 HaBaseline detail:Season (Air / Water / Noise / Survival y Hydro geological study/ Traffic Study/othersPeriod of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t-monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	Budget for nursery	NA
No. of tree cuts in the min ne lease area and compensatory afforestation150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period.Particulars for Green bel t/plantationArea covered (in Ha)7.5 m barrier & non-min eralized zone2.71 HaSaseline detail:Season (Air / Water / Noise / Soi/ Hydro geological study/ Traffic Study/othersPeriod of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t-monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	Details of existing planta tion and its survival rate	NA as it is greenfield project
Particulars for Green bel t/plantationArea covered (in Ha)7.5 m barrier & non-min eralized zone2.71 Ha2.71 HaPayment SSaseline detail:Saseline detail:Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/othersPeriod of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t - monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	No. of tree cuts in the mi ne lease area and compe nsatory afforestation	150 trees will be cut in the mine lease. Total about 96959 trees will be planted upto conceptual period.
7.5 m barrier & non-min eralized zone2.71 HaPeriodA. Baseline detail:	Particulars for Green bel t/plantation	Area covered (in Ha)
K. Baseline detail:Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/othersPeriod of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t- monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	7.5 m barrier & non-min eralized zone	2.71 Ha e-Payments
Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/othersPeriod of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t- monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	. Baseline detail:	
Period of baseline data collectionMarch to May 2023Season (Summer / Pre-monsoon / Pos t- monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	Baseline Data (Air / Water	/ Noise / Soil / Hydro geological study/ Traffic Study/others
Season (Summer / Pre-monsoon / Pos t-monsoon / Winter)Summer SeasonPredominant Wind direction (From)Towards East	Period of baseline data coll	ection March to May 2023
Predominant Wind direction (From) Towards East	Season (Summer / Pre-mon t- monsoon / Winter)	Isoon / Pos Summer Season
	Predominant Wind direction	on (From) Towards East

No.	of	locations-	06
1.0.	U 1	rocations	00

Results- Core zone: The mean value of PM10 ranges from (59.27 - 61.11 g/m³) & PM2.5 ranges from (26. 51 - 27.33 g/m³), SO2 ranges from (5.28 - 5.44 g/ m³), NO2 ranges from (14.82 - 15.28 g/m³) & CO ra nges from (0.26 - 0.27 mg/m3) which are within the limits of National Ambient Air Quality Standards (N AAQS). As per the Air Quality Index by CPCB, the air quality of the core zone is found to be Satisfactor y in the Summer season.

Buffer zone: The mean value of PM10 ranges from (64.77 - 75.53 g/m³), PM2.5 ranges from (28.97 - 34. 17 g/m³), SO2 ranges from (5.77 - 7.19 g/m³), NO2 r anges from (16.19 - 19.24 g/m³) & CO ranges from (0.29 - 0.34 mg/m3) which are within the limits of N ational Ambient Air Quality Standards (NAAQS). A s per the Air Quality Index by CPCB the air quality of the buffer zone is found to be Satisfactory during the sampling campaign.

No. of locations- 08

Results- Core Zone (Industrial Area): N1 & N2: The ambient noise level during day time at the proposed project site varies from 52.60 dB (A) to 53.20 dB (A) which are within the standard limit of Industrial a rea ~ 75 dB (A). During night the noise level at the p roject site ranges from 44.40 dB (A) to 45.10 dB (A) which are within the standard limit of Industrial area 70.0 dB (A).

Buffer Zone: Residential Area: N4, N5, N7 & N8:-T he ambient noise level during day time at the propos ed project site varies from 52.10 dB (A) - 54.60 dB (A) which are within the standard limit of Residential area ~55 dB (A). During night the noise level at the project site ranges from 43.90 dB (A) to 47.20 dB (A) which is slightly higher noise level compared to t he standard limit of Residential area 45 dB (A). It m ay be regarded as the residential and other local acti vities occurring within the village.

Commercial Area: N3 & N6: The ambient noise lev el in commercial area i.e. Approach Road & NH-6 is 53.40 dB (A) to 62.80 dB (A) during day time which is within the standard limit of commercial area of ~ 65 dB (A) and 44.80 dB (A) to 57.90 dB (A) during

Noise level (no. of locations) and res ults

Ambient Air Quality (no. of location

s) and results

	night time which is slightly higher noise level comp ared to the standard limit of commercial area ~ 55 d B (A).
Water Quality (no. of locations) and r esults	No. of GW locations- 07 No. of SW locations- 04 Results of GW- The Total Dissolved Solids (TDS) of the all (W1 to W7) sampling locations ranges from 68 mg/l to 182 mg/l which are within the drinking water standard (I S:10500) i.e. 500 mg/l. The Total Hardness of the sampling locations range s from 18 mg/l to 70 mg/l which are within the drink ing water standard (IS:10500) i.e. 200 mg/l. The Alkalinity of the sampling locations ranges fro m 22 mg/l to 52 mg/l which are within the drinking water standard (IS:10500) i.e. 200 mg/l. The Fluoride content in the sampling locations rang es from <0.1 mg/l to 0.64 mg/l which are within the drinking water standard (IS:10500) i.e. 1.0 mg/l. The Calcium Concentration of sampling locations r anges from 5.4 mg/l to 26 mg/l. Calcium levels of sa mpling locations are within the drinking water stand ards (IS:10500) i.e. 75 mg/l. The Magnesium Concentration of sampling locations s ranges from 0.48 mg/l to 7.20 mg/l. Magnesium levels of sampling locations are within th drinking water standards (IS:10500) i.e. 30 mg/l. The Chloride Concentration of all the sampling locat ions ranges from 6 mg/l to 42 mg/l. Chloride levels of all the sampling locations are within the drinking water standards (IS:10500) i.e. 250 mg/l. Results of Surface Water- Surface water samples were derived from 4 location s in different surface water bodies within study area, analysis results of the same revealed that pH values amongst all samples varied in the range of 7.33 - 7.7 0, Total Hardness concentration varied in the range of 92 mg/l to 172 mg/l &, TDS concentration varied in the range of 162 to 218 mg/l. Electrical Conductiv ity was found to be ranging in between 352 to 412 m S/cm. The surface water samples are falls under class C, D

water source after conventional treatment and disinf ection, Water is suitable for Propagation of Wildlife and Fisheries & Irrigation, Industrial Cooling, Contr olled Waste disposal.		
No. of locations- 08 Results- Soil samples at location S1 - S8 shows that the soil texture class is Clay, Clay Loam, Colour is 5/3 dull reddish, brown (3/4), (5/3) dark brown, (5/ 3) dull reddish, pH range is 6.87 - 7.70. Amount of p rimary nutrients like Organic matter range is (0.35 - 2.12) %, the available nitrogen range is (82.40 - 122. 60) mg/kg is Low and available Potassium range is (12.20 - 41.20) mg/kg is Low while the available Pho sphorus range is (8.60 - 19.10) mg/kg is Medium to high. Thus it can be concluded that soil is average fe rtile.		
2 Locations, LOS of both locations -"A".		
on the said land, hence, R&R is not applicable.		
PC CDEEN S		
t court The Project Proponent reported that there is no litigation pending against the project and/ or land in which the project is proposed to b e set up.		
The Project Proponent has submitted the Affidavit in a nonjudicial stamp paper of Rs 10 dated 26.12.2023 stating that the company undertakes by affidavit that they commit to comply with the order of the Hon'ble Supreme Court order dated 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of com		

xiv. ADS details: The Proposal was earlier considered in the 26th EAC (Non-Coal Mining) meeting held
during 31st January & 1st February, 2024 wherein the Committee has deferred the proposal for
the submission of requisite information. The Project Proponent has submitted their reply vide
letter dated 13.03.2024 are as follows:

S.No	Observation of EAC	Reply by project proponent	
1	The EAC opined that the Mi nistry may seek comments fr om the Eco-Sensitive Zone (ESZ) Division in the Ministr y stating whether the instant	Eco-Sensitive Zone (ESZ) Di vision of the Ministry referred to the Hon'ble Supreme Court of India orders dated 26.04.20 23 and further clarification iss ued on 28.04.2023 by the Ho n'ble Supreme Court in I.A N o. 131377 of 2022 in W.P (C) 202 of 1995: T.N. Godavarma n Thirumulpad Vs UoI&Ors., mining not only within ESZ, but also even if ESZ is less th an 1.0 km, is strictly prohibite	
1y e.com	mine lease area falls under E co-Sensitive Zone or not.	d. In the absence of kml/shape fi le of the ESZ boundary and th e Protected Area, vis-à-vis the mine location co-ordinates, it is difficult to assess specifical ly the distance of nearest mini ng activity from the nearest E SZ boundary.	
2.	The EAC also asked the Pro ject Proponent to submit a le tter from the State Forest De pt. clearly stating that the mi ne lease area falls under Ec o-Sensitive Zone or not.	After physical verification by the DFO (T) Division, it is ce rtified that the said area of lim estone mining of 65 ha is a no n-forest land and is also not a part of any Reserve Forest/ Pr otected Forest/Community Re serve/Wildlife Corridor/ Biod iversity Heritage site/ Catchm ent area/sacred grooves and it is also outside the Narpuh Wi Idlife Sanctuary and its Eco S ensitive Zone. The letter date d 24.01.2023 has been submit ted by the Project Proponent.	



Based on the site inspection r eport of the DFO, Conservato r of Forest (T), Office of the P rincipal Chief Conservator of Forest (HoFF), Department of Forests and Environment, Go vernment of Meghalaya has al so issued a letter dated 14.02. 2023, clearly stating that the p roposed site is not part of any forest land and does not fall w ithin the Eco Sensitive Zone n or WL Sanctuary. Letter date d 14.02.2023 has been submit ted by the Project Proponent. The Project Proponent has obt ained the Non-Forest Certific ate issued by the Chief Conse rvator of Forest, Office of the Principal Chief Conservator o f Forest (HoFF), Department of Forests and Environment, Government of Meghalaya on 30.03.2023 and same letter ha s been submitted by the Proje ct Proponent.

As per the discussion held dur ing the 26th EAC dated 31.0 1.2024, the Project Proponent has again applied to the Addit ional Principal Chief Conserv ator of Forest (T) for issuing c larification that the project lan d is outside the boundary of t he notified Eco Sensitive Zon e of Narpuh Wildlife Sanctuar y vide letter no. SCML-65 ha/ PCCF/2023-24, dated 01.02.2 024. GIS Lab of the Office of the Principal Chief Conservat or of Forest (HoFF), Departm ent of Forests and Environme nt, Government of Meghalay a, Shillong has generated the



map on the GPS Co-ordinates pertaining to the plot of 65 ha and has also certified that the said plot is outside the bound ary of the notified Eco Sensiti ve Zone of Narpuh Wildlife S anctuary. The Project Propon ent has received information f rom the Conservator of Forest s (T), Office of the Principal Chief Conservator of Forest (HoFF), Department of Forests and Environment, Governme nt of Meghalaya vide letter n o. MFG.16/50/CMCL/Vol-II I/16.676 dated 08.02.2024 wh ich states that:

"As per the map and the repor t of Divisional Forest Officer, Jaintia (T) Division, Jowai de picting the same dated 24.01. 2023, the boundary of limesto ne mining lease and prospecti ng license of 65 Ha at Brichyr not village, ElakaNarpuh, Eas t Jaintia Hills District as appli ed by M/s Star Cement Megh alaya Limited is located outsi de the boundary of the notifie d Eco-Sensitive Zone of Narp uh Wildlife Sanctuary."

Thus, on the basis of above in formation the Project Propone nt informed that the land is at a distance of approx. 25.29 m tr from the Eco Sensitive Zon e of Narpuh Wildlife Sanctuar y and 1.342 km from the bou ndary of Narpuh Wildlife San ctuary which is more than 1 k m as per the Order of the Ho n'ble Supreme Court of India. The Project Proponent has req uested to DFO for issuance of



certificate confirming that the mining lease area measuring 65 ha land falls outside the no tified Eco Sensitive Zone (ES Z) of Narpuh Wildlife Sanctu ary vide letter no. SCML-65h a/DFO/2023-24 dated 01.02.2 024.

DFO. Jaintia Hills Wildlife D ivision Jowai has issued a lett er no. MWL/JH/299/Mining Plan/2022-23/2135 dated 1st March, 2024 supported by ma p mentioning that mining area of 65 ha is located at distance of 25.29m away from the bou ndary of the ESZ of Narpuh Wildlife Sanctuary and 1.342 km away from the boundary o f Narpuh Wildlife sanctuary. The Project Proponent inform ed that as per the kml file avai lable on the Parivesh portal th e status of this plot of land sh

- The project is outside th e ESZ boundary of the Narpuh Wildlife Sanct uary.
- The Forest Clearance an d Wildlife Clearance d o not apply to this proj ect which implies that the project is outside o f the ESZ boundary.

xv. Detailsof project cost and employment:

Particulars	(Rs. In Lakhs)
Project Cost	Rs 33.96 crores
Employment	94

3.2.3. Deliberations by the committee in previous meetings

Date of EAC 1 :31/01/2024

Deliberations of EAC 1 :

The Project Proponent/EIA Consultant presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent showed the boundary of the mine lease area and informed the EAC that a river is located adjacent to the mine lease area at a distance of 0.07 km on north eastern side. The instant proposal attracts the general conditions as Narpuh Wildlife Sanctuary boundary is located at a distance of 1342 m, SE direction and it's ESZ boundary at a distance of 25.29 m, SE to the project site. The EAC noted that the mine lease area is located in the hilly terrain and asked the Project Proponent to show the distance of the Narpuh Wildlife Sanctuary. The Project Proponent presented the map authenticated by the Divisional Forest Officer, Jaintia Hills Wildlife Division, Jowai showing the distance of Narpuh Wildlife Sanctuary located at a distance of 1342 m, SE and ESZof Narpuh Wildlife Sanctuary located at a distance of 25.29 m, SE from the mine lease area on South Eastern side. The EAC noted that the State Forest Dept. letter dated 23.02.2023 clearly does not indicated that the mine lease area is outside the ESZ. The EAC observed that as per Final Notification declaring Eco Sensitive Zone around Narpuh Wildlife Sanctuary vide S.O.2942(E) dated 06.09.2017, Village Brichymot is partly falling within the Eco-sensitive Zone of Narpuh Wildlife Sanctuary. The Project Proponent informed the EAC that the instant mine lease is not falling within the Eco-Sensitive Zone of Narpuh Wildlife Sanctuary. The EAC was of the view that there is no any supporting document submitted by the Project Proponent in this regard. The EAC asked the EIA Consultant that whether they visited the site or not. The EIA Consultant informed the EAC that being a green field project, site visit was not undertaken. The EAC was of the view that the EIA Consultant who visited the site should present the technical presentation before the EAC.

The Project Proponent also presented the conceptual plan. Nearest habitation is Brishyrnot at a distance of 160m on southern side. The EAC asked about the elevation of the habitation. The Project Proponent informed the EAC that elevation ranges from 391 mRL – 346 mRL and the instant mine lease is at 295 mRL. The material after blasting will be transported to crusher located at a cement plant at a distance of 1.85km by road. The Office of the Principal Chief Conservator of Forests (HoFF) vide letter dated 30.03.2023 certifying that plot of land measuring 65 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012. India – Bangladesh boundary is located at a distance of 12.5 km from the mine lease area. A requisition letter has been submitted to the State Govt. for obtaining NOC from Ministry of Defence and is under process. Ultimate level of excavation will be 70 mRL. No groundwater intersection is involved. At the conceptual stage, the excavated area will be 61.93 ha, out of which 52.52 ha mined out benches will be rehabilitated by plantation, 9.41 ha will be converted into a water reservoir & 0.36 ha undisturbed area will be covered under plantation. No R&R is involved in this proposal. The EAC asked the Project Proponent whether the mineral Shale is mentioned in mine lease document or not. The Project Proponent informed the EAC that the mining lease granted for both minerals such as Limestone and Shale and accordingly mining plan was prepared and submitted to Indian Bureau of Mines (IBM) on 07.11.2023 for approval.

After detailed deliberations made by the Project Proponent and the EIA Consultant, the EAC was of the view that it is mandatory to know whether the mine lease area falls under Eco-Sensitive Zone or not. The EAC opined that the Ministry may seek comments from the Eco-Sensitive Zone (ESZ) Division in the Ministry in this regard. The EAC also asked the Project Proponent to submit a letter from the State Forest Dept. clearly stating that the mine lease area falls under Eco-Sensitive Zone or not. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

i. The EAC opined that the Ministry may seek comments from the Eco-Sensitive Zone (ESZ) Division in the Ministry stating whether the instant mine lease area falls under Eco-Sensitive Zone or not.

ii. The EAC also asked the Project Proponent to submit a letter from the State Forest Dept. clearly stating that the mine lease area falls under Eco-Sensitive Zone or not.

3.2.4. Deliberations by the EAC in current meetings

The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 1342 m, SE direction and its ESZ boundary is located at a distance of 25.29 m SE to the project site. The project proponent after explaining the site features on the KML presented the reply of

the ADS points raised during the 26th EAC Meeting held during 31st January & 1st February 2024. The EAC noted the comments of ESZ Division of the Ministry as well as the submission of PP with regard to the distance of the project site from the ESZ boundary based upon the DFO letter dated 24.01.2023 and CF letter dated 14.02.2023. The EAC also noted that the PP has obtained NoC from Ministry of Defence vide letter dated 05.04.2024.

Thereafter EAC enquired about the measures proposed by PP to protect the river flowing adjacent to mine site in the northern direction at located a distance of 0.07 Km. PP informed that they have designated the area upto 50 m towards the side of the river as a no mining zone. The EAC opined that the river should be protected and efforts should be made towards maintaining its originality. The EAC advised the PP to ensure that untreated water/effluent is not disbursed into the river stream at any point of mine operation. Adequate streams protection measures are to be taken by constructing embankment along the ML area near to the river. PP shall ensure that the natural flow of the river is maintained. The EAC also noted that PP intends to mine shale which is a minor mineral, accordingly, EAC asked the PP to submit the SEIAA approved DSR for shale. The EAC also suggested the PP to explore the possibility of installing a mobile crusher within the mine lease area and laying a OLBC to transport the mined ore instead of transporting it through a private road by dumpers/tippers.

Based on the above, EAC recommended the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Brishyrnot Limestone Deposit-II with total excavation of 3.58 MTPA (3.0 MTPA of Limestone, 0.2 MTPA of Shale, 0.38 MTPA of Waste/OB including Soil in the ML area of 65 ha by M/s Star Cement Meghalaya Limited located at Village Brishyrnot, Tehsil Khliehriat, District East Jaintia Hills, Meghalaya under provisions of EIA Notification, 2006 and its amendments therein with following specific conditions in addition to the standard conditions applicable for non-coal mining projects:

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

district survey report

e-Payments

btects if Swe

1. The project proponent needs to submit the SEIAA approved District Survey Report for Shale during submission of EC application.

installing fixed/mobile crusher

1. The Project Proponent shall explore the possibility of installing fixed/mobile crusher within the ML Area.

olbc for transportation

1. The Project Proponent shall explore the possibility of laying OLBC for transportation of the mined out material.

action plan

1.	The Project Pro	ponent needs to	submit the action	plan for year	r wise backfilling.
		1			U

year wise excavation

1. The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.

total excavation in tonnes

The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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.

land use/land pattern

The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.

drone survey

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1.

The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.

ambient air quality

The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.

baseline data

'~Payments

1. The Project Proponent shall obtain the baseline data from the nearby existing industries and showcase the comparison between its baseline data with the others.

prepare the emp

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.

transport route

1. The Project Proponent needs to submit the map showing the transport route of the mineral from the

mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.

assessment of impact

1.

1.

1.

The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

recycle/re- use of water

The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified
 by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.

construction of retaining wall

1. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.

greenbelt/afforestation development

The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.

employment based skill development

1. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.

monitor the water quality

*-Payments

The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

specific diesel consumption

PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total
excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.

cumulative impact assessment

The Project Proponent needs to carry out the cumulative impact assessment showcasing the impact
 by considering all peripheral mining activities of the combined mine operation for area towards wildlife sanctuary.

continuous automatic air quality monitoring station (caaqms)

PP shall prepare a Plan for implementation of Continuous Automatic Air Quality MonitoringStation (CAAQMS) at mine site or its vicinity.

wind rose pattern

1.

Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be
planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.

parameters in surface water

Heavy metals including other parameters in surface water quality shall be analyzed and provided in EIA Report. Further, detailed mineralogical and chemical composition of the mineral and percentage of free silica in Air quality and other parameters Arsenic, Lead shall also be analyzed in ambient air quality & to be furnished in EIA/EMP report.

monitoring stations & sampling locations

The PP while carrying out base line monitoring should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the

1. monitoring station/sampling location. In addition to this PP should also submit the original Lab reports of air, water, soil and noise quality and NABL/MoEF&CC certificates of the respective laboratory.

air pollution control equipment (apces)

PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as
part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs.

lng/cng

1. PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.

action plan for prevention of landslide

1. The PP shall submit an action plan for prevention of landslide and rollouts from the surrounding hillocks, inter alia, including plantation, cribs and gabbions, etc.

hydrological regime of the area

1. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.

quantity of surface or ground water

PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.

implementation of environmental management plan (emp)

PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

time bound budget

1.

1.

PP should submit the year-wise, activity wise and time bound budget earmarked for EMP,
occupational health surveillance & Corporate Environmental Responsibility needs to be submitted.
The capital and recurring expenditure to be incurred needs to be submitted.

glcs value<mark>s</mark>

The control case and worst-case scenario needs to be demonstrated with controlling factor and
 GLCs values for all the pollutants and it should be clearly mentioned. The input parameters used for the modeling also needs to be submitted in the EIA/EMP report.

6)

schedule- i species

The project proponent needs to carry out the study to identify the species including the Schedule-I
species as per Wildlife Act and prepare the wildlife conservation plan for the available Schedule-I species. The wildlife conservation plan should cover the impact of mining.

eia report

1.

The project proponent needs to carry out the Vibration study and submit the impacts of vibration during blasting in the EIA report. Effective measures should be taken to prevent the damage due to fly rock and its impact on the nearby Lumshnong village. Blasting activity shouldn't cause damage to the nearby villages.

public hearing

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 with a timeline for the concerns of the local people in terms of Education, Health-care and Environment.

impact of earthquake

1. The impact of earthquake on the mining operation vis-à-vis Safety for the mine be delineated in the EIA report.

court order

1.

PP should submit an undertaking by way of affidavit as per Ministry's O.M No 3-50/2017-IA. II (M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 passed in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

stream/nallah

PP should not divert any stream/nallah passing through the ML area or flowing adjacent to the ML
area. PP shall ensure the natural flow is not affected and shall undertake upstream/downstream monitoring of flow and quality of water.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

"Daba Saitthad Limestone Deposit" having mining lease area of 25 Ha by Star Cement Limited. by STAR CEM ENT LIMITED located at EAST JAINTIA HILLS, MEGHALAYA

Proposal For	ofects of S	Fresh ToR	20
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/ML/MIN/449327/2023	IA-J-11015/39/2023-IA-II(NC M)	19/10/2023	Mining of minerals (1(a))

3.3.2. Project Salient Features

The instant proposal is for Terms of Reference for mining of Limestone in Daba Saitthad Limestone Deposit of M/s Star Cement Ltd with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha, located at Daba Saitthad (Wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

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

1. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts

3. Details of Mine Lease:

S. No	Prospecting Licens e/ Letter of Intent (LoI)/ Grant of Min e lease and Lr No	Date of the grant	Name of th e Mineral & (Major/ Minor)	Period of Gra nt	Granted by	Mine lease area i n Ha
1	Prospecting Licens e- MG.6/2023/33	01.03.2023	Limestone (Major)	3 year s	Mining & Geo logy Departm ent, Governm ent of Meghal aya	25 h a.
2	Letter of Intent- M G.6/2023/277	28.08.2023	Limestone (Major)	3 year s	Mining & Geo logy Departm ent, Governm ent of Meghal aya	25 h a.
3	Lease Deed	12.02.2024	Limestone (Major)	50 Ye ars	Mining & Geo logy Departm ent, Governm ent of Meghal aya	25 h a.
C	Ś	Deriod of	tects of She	10		
5. N	Details of grant of Mir	ne	Grant	Nam	ne of the Min	e lease
0	Lease deed execution	From	ToRE	Mine	eral area	in Ha
1.	Mine Lease Deed	12.02.202	4 11.02.207	Lime ajor)	estone (M 25 h	ia
4.	4. Land Use/Land Cover of the Mine Lease Area:					
Priva	te land					25 h a.

Government land

Forest land

Total Mining lease area (MLA), ha

-

Nil

25 h

	a.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

5. Mining plan details:

=

	Letter No.	MCDR-MPCP0CaFl/10/2023-GUH-IBM_ RO_GUH	
	Date	11.12.2023	
Mining Plan(approved by In dian Bureau of Mines/DMG)	Mineral (Major/Mino r)	Major	
3	Mine Lease Area, Ha	25	
~	Validity	5 years from the date of execution of minin g lease	
Mining Parameters	Quantitative Description		
Method of Mining	Opencast mechanized mining		
Drilling/Blasting	Deep hole drilli	ng & blasting.	
Geological Reserves	52.44 million to	INS REEL COST	
Mineable Reserves	40.89 million to	ns Pro	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	2.832 MTPA (in PA of Waste/Ol	ncluding 2.51 MTPA of limestone, 0.322 MT B including topsoil).	
Life of mine	50 Years [Max production of Lst (ROM) shall be restricted t o 2.51 MTPA. Production from this mine at a later stage of ML may get reduced. Additional exploration shall also be tak en up which will increase the reserves.]		
Mine Bench Height & Benc h Width	The height of the bench will be 9 m and a minimum working width of the benches in mineral will be 18 m for safe operati on of mining machinery.		

No. of Mine Benches	13		
Existing Depth, m bgl	NA, as it is a green field project		
Ultimate Depth of Mining, m bgl	137		
Ground Water Table, m bgl	156		
Details of ground water inter section	Water table will not be intersected as it is at 156 m bgl and m ining will be done up to 137 m bgl.		
Individual bench slope	85° from horizontal		
Overall pit slope	<45°		
Details of existing/ proposed Crusher	There is no crusher proposed within the mining lease area. Li mestone will be transported to the cement plant crusher.		
Mineral Beneficiation	NA		
RoM output size	-1000 mm		
Transportation details includ ing capacity of dumper/tipper, m ode of transport and distance	The material after blasting will be loaded by hydraulic excav ators of about 2.6 m^3 bucket capacity into tippers of 25 tons c arrying capacity for its transportation to crusher at a distance of 4.6 km and temporary waste dump inside mining lease.		
Generation of Topsoil/OB & its Management during plan	Max. 322,524.25 TPA of Waste/OB including topsoil will be generated. Waste/OB will be dumped temporarily at earmarked places. Later it will be used as blending material after taking permiss ion from the Government. The topsoil generated will be used extensively for plantation.		
period & conceptual period	Later it will be used as blending material after taking permiss ion from the Government. The topsoil generated will be used extensively for plantation.		

Total water require ment	40 KLD	Fresh water	05 KLD	

	Tre	eated water	35 KLD
Source	Total water requiremen which will be sourced the nt plant.	t for the proposed mine will hrough water tankers from th	be around 40 KLD e company's ceme
Permission	Vide Letter No. AGRO Sep 2004	/IRRI-110/96/2004-05/80 da	ted Shillong, 15th
Additional informa tion(if any)	Total water requiremen out of which 35 KLD w h water for domestic pu	t for the proposed mine will l vill be STP treated water and rposes.	be around 40 KLD, 5 KLD will be fres

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

Particulars	Particular's Name	Distance & Directions
Village	Lumshnong	1.95 Km NE
Town	Khliehriat	21.70 Km N
Highway	NH-6	0.57 km SE
Interstate Boundary	 India-Bangladesh Internati onal Boundary Meghalaya-Assam State B oundary 	9.08 km SSW 12.88 Km SE
Railway station	Hilara railway station	65 km (by road)
Water bodies	Um Badoh Stream Lubha River Seshympa River WahLukha River ThangpyrshaidNala Sakha Nala KukhaNala KhaddumPieltleng Falls DongtangleNala Prang River RumplungNala Natural swimming Pool AphaNala Cher Fall	0.85 Km WNW 3.71 km SE 4.87 Km WSW 6.36 Km ENE 6.60 Km N 7.79 Km N 7.99 Km NE 8.37 Km ENE 8.74 Km NNE 9.16 Km WSW 9.27 Km SW 9.28 Km NE 9.56 Km S 9.69 Km NE

	LarungNala SharaiNala	9.76 Km SW 10.29 Km SW
Forest	Narpuh Reserve Forest	4.13 km SSW

8. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Are a/Environmental Sensitivit y Zone	Yes/N o	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest land within the min e lease area and (if yes) statu s of Forest Clearance	No	Not Applicable
National Park	No	Not Applicable
Wildlife Sanctuary	Yes	Narpuh Wildlife Sanctuary - 3.90 km SE
Eco-Sensitive Zone(ESZ) / Eco- Sensitive Area(ESA)	Yes	Narpuh Wildlife Sanctuary ESZ - 2.70 km SE
Coastal Regulation Zone (CRZ)	No	Not Applicable
Schedule-I species (No.s a nd name of schedule-I species with authenticated letter)	Yes	There are ten Schedule I Species found in the buffer zone are given below: <i>Hoolockhoolock</i> (Western hoolock gibbon), <i>Nyctice</i> <i>busbengalensis</i> (Slow loris), <i>Prionailurusbengalensi</i> <i>s</i> (Leopard Cat), <i>Python molurus</i> (Indian Rock Pytho n), <i>Neofelisnebulosa</i> (Clouded Leopard), <i>Bucerosbic</i> <i>ornis</i> (Great Pied Hornbill), <i>Canis lupus pallipes</i> (In dian Wolf), <i>Manispentadactyla</i> (Pangolin), and <i>Melur</i> <i>susursinus</i> (Sloth bear), <i>Capricornissumatraensistha</i> <i>r</i> (Himalayan serow).
Wildlife Conservation Pla n	Yes	The Chief Wildlife warden had a meeting with Indus tries and Government departments for preparation of Regional Conservation plan for the East Jaintia Hills district under the supervision and guidance of CWL W, Meghalaya and the cost for preparation and impl

	ementation of the Regional Conservation Plan may be shared by various project proponents on a proport ionate basis keeping in view the likely impacts of ea ch project on the wild life and their habitat. Project p roponent also confirmed that they shall be part of th e regional conservation plan and will pay the fee as determined for project.
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9. Green belt/plantation details:

Proposed area for green belt/plantation	At the end of life of mine, out of the total 25 ha area, 20.12 ha will be used for Bench Plantation/ Grassification, 1.46 ha. along the 7. 5 m wide peripheral boundary will be developed to green belt.
Budget for green plant & plantation till the end of life of mine.	Rs 1.03 Cr
Budget for nursery	NA
Details of existing plan tation and its survival r ate	NA as it is greenfield project
No. of tree cuts in the mine lease area and co mpensatory afforestatio n	215 trees will be cut in the mine lease. Total about 37854 trees will be planted upto conceptual period.
Particulars for Green b elt/plantation	Area covered (in Ha)
7.5 m barrier & non-mi neralized zone	1.46 Ha e-Payments
10. Baseline detail:	

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/others	
Period of baseline data collection	March to May 2023
Season (Summer / Pre-monsoon / Pos t- monsoon / Winter)	Summer Season

Predominant Wind direction (From)	Towards East
Ambient Air Quality (no. of location s) and results	No. of locations- 06 Results-Core zone: The mean value of PM10 ranges from (64.55 - 66.49 g/m ³) & PM2.5 ranges from (29. 20 - 30.08 g/m ³), SO2 ranges from (6.15 - 6.33 g/ m ³), NO2 ranges from (16.45 - 16.94 g/m ³) & CO ra nges from (0.29 - 0.30 mg/m3) which are within the limits of National Ambient Air Quality Standards (N AAQS). As per the Air Quality Index by CPCB, the air quality of the core zone is found to be Satisfactor y in the Summer season. Buffer zone: The mean value of PM10 ranges from (69.07 - 75.53 g/m ³), PM2.5 ranges from (31.25 - 34. 17 g/m ³), SO2 ranges from (6.57 - 7.19 g/m ³), NO2 r anges from (17.60 - 19.24 g/m ³) & CO ranges from (0.31 - 0.34 mg/m3) which are within the limits of N ational Ambient Air Quality Standards (NAAQS). A s per the Air Quality Index by CPCB the air quality of the buffer zone is found to be Satisfactory during the sampling campaign.
Noise level (no. of locations) and res ults	No. of locations- 08 Results- Core Zone (Industrial Area): N1 & N2: The ambient noise level during day time at the proposed project site varies from 57.4 dB (A) to 57.6 dB (A) which are within the standard limit of Industrial area ~ 75 dB (A). During night the noise level at the proj ect site ranges from 44.7 dB (A) to 44.8 dB (A) whi ch are within the standard limit of Industrial area 70. 0 dB (A). Buffer Zone:Residential Area: N5 to N8-The ambie nt noise level in residential areas ranges from 53.1 d B (A) - 56.6 dB (A) during day time and from 43.9 d B (A) to 47.2 dB (A) during night time. The slightly higher noise level compared to standard limit may b e regarded to the residential and other local activities occurring within the village. Commercial Area:N3- Approach Road, N4- NH - 6 The ambient noise level in commercial area i.e. Approach Road & NH-6 is 57.4 dB (A) to 62.8 dB (A) during day time which is within the standard limit t of commercial area of ~ 65 dB (A) and 46.7 dB (A) to 57.9 dB (A) during night time which is slightly hi

	gher than the standard limit of commercial area ~ 55 dB (A).
Water Quality (no. of locations) and r esults	No. of GW locations- 08 No. of SW locations- 04 Results of GW- The Total Dissolved Solids (TDS) of the sampling 1 ocations W1, W2, W3, W4, W5, W6, W7, W8 range s from 68 mg/l to182 mg/l which are within the drin king water standard (IS:10500) i.e. 500 mg/l. The Total Hardness of the sampling locations range s from 18 mg/l to 70 mg/l which are within the drink ing water standard (IS:10500) i.e. 200 mg/l. The Alkalinity of the sampling locations ranges fro m 13.80 mg/l to 61.60 mg/l which are within the dri nking water standard (IS:10500) i.e. 200 mg/l. The Fluoride content in the sampling locations rang es from <0.1 mg/l to 0.64 mg/l which are within the drinking water standard (IS:10500) i.e. 1.0 mg/l. The Calcium Concentration of sampling locations r anges from 5.4 mg/l to 26 mg/l. Calcium levels of sa mpling locations are within the drinking water stand ards (IS:10500) i.e. 75 mg/l. The Magnesium Concentration of sampling locations r anges from 0.48 mg/l to 7.20 mg/l. Magnesium levels of sampling locations s ranges from 6.80 mg/l to 31 mg/l. Chloride lev els of all the sampling locations are within the drinking water standards (IS:10500) i.e. 30 mg/l. The Chloride Concentration of all the sampling location s ranges from 6.80 mg/l to 31 mg/l. Chloride lev els of all the sampling locations are within the drinki ng water standards (IS:10500) i.e. 250 mg/l. Results of Surface Water- Surface water samples were derived from 4 location s in different surface water bodies within study area, analysis results of the same revealed that pH values amongst all samples varied in the range of 7.40 - 7.7 8, Total Hardness concentration varied in the range of 118 mg/l to 172 mg/l &, TDS concentration varie d in the range of 201 to 252 mg/l. Electrical Conduct ivity was found to be ranging in between 352 to 432 mS/cm. The surface water samples falls under class D & E a s per CPCB surface water criteria i.e. Water is suitab le for Propagation of Wildlife and Fisheries

Soil Quality (no. of locations) and res ults	No. of locations- 08 Results- Soil samples at location S1 - S8 shows that the soil texture class is Clay, Clay Loam, Colour is 5/3 Dull reddish brown, Brown (3/4), 5/3 Dull brow n, pH range is (6.90 - 7.70). Amount of primary nutr ients like Organic matter range is (0.35 - 2.31) %, th e available nitrogen range is (62.40 - 106.40) mg/kg is Low and available Potassium range is (12.20 - 43. 70) mg/kg is Low while the available Phosphorus ra nge is (7.20 - 14.10) mg/kg is medium to high. Thus it can be concluded that soil is average fertile.
Hydro geological study and results	Not conducted
Traffic study (no. of locations) and re sults	2 Locations, LOS of both locations -"A".

11. Rehabilitation & Resettlement:

12. Court case details:

ſ

Court Case, No and its present status	The Project Proponent has submitted that the
	re is no litigation pending against the project
Undertaking by Project Proponent w.r.t court	and/or land in which the project is proposed
case	to be set up
	CREE!

13. Affidavit/Undertaking details:

	The Project Proponent has submitted the Affidavit d
	ated 17.10.2023 stating that they commit to comply
Affidavit as per Ministry's OM dated	with order of the Hon'ble Supreme Court order date
30.05.2018	d 2 nd August 2017 in Writ Petition (Civil) No. 114 o
	f 2014 in the matter of common cause versus Union
	of India &Ors.

xiv. ADS details: The proposal was considered in the 22nd EAC (Non-Coal Mining) meeting held during 14-15 November, 2023 wherein the Committee deferred the proposal for additional information. The Project Proponent vide letter dated 13.03.2024 submitted the information on Parivesh which is given as under:

S. ADS Point Reply by project proponent

No		
i	The Project Proponent n eeds to submit the NOC from the Ministry of Def ence.	The Project Proponent has submitted the NOC from the M inistry of Defence dated 05.04.2024.
ii	The Project Proponent n eeds to submit the width of the public road.	The existing road is an approach for broom garden & a ha mlet. After appraisal project proponent has changed the ali gnment of the road which is now passing through private 1 and having agreement with the owners for transportation o f Limestone. The Project Proponent has submitted the Pla n.
iii	The Project Proponent n eeds to submit the hardn ess of Limestone tested b y a reputed Institute.	As advised, Limestone samples from Daba Saitthad Limes tone Deposit of 25.00 Ha Mining Lease Area of Star Cem ent Limited were sent to Indian Institute of Technology (I ndian School of Mines), Dhanbad for determination of Mo h's hardness along with Compressive strength, Tensile str ength. Their recommendation are as under: "The results of Moh's hardness ranges from 3 to 5. In gen eral, the Moh's hardness is an indirect measure of the tool consumption of the cutting machine, again this is indicativ e of high tool consumption that may result into more dow ntime of the surface miner machine on account of tool cha nge if deployed. Therefore, based on the test results it is re commended to avoid deployment of surface miner." "It is observed from the test results of UCS of rock sample s of Dabba Saitthad Limestone Deposit of 25.00 Ha Minin g Lease Area of Star Cement Limited, that the compressiv e strength has an average value of 47.48 \pm 16.2 (/2) whic h is considered a high value for deployment of Continuous Miner as far as production capacity is considered (Kramad ibrata, 1996). At this value the surface miner will be produ cing at a very low and uneconomical rate." "Considering the test results of the tensile strength of the r ock samples of Daba Saitthad Limestone Deposit of 25.00 Ha Mining Lease Area of Star Cement Limited, the averag e value is 25.95 \pm 3.78 MPa. At this value of tensile streng th, the deployment of Surface miner is ruled out (Figure 2). As can be seen that the deployment of surface miner is practically unsuitable beyond 6 MPa of tensile strength of rock." The project proponent has requested EAC to refer page n

ivThe Project Proponent has examined the possibility of alling fixed/mobile crusher within the lease area & ra s as under: Mining lease area is only 25 Hectare, so as to conserve mineral resource Crusher is located outside the minin se area in the Cement plant premises. Common crushers will be operated at Cement plant f mestone, received from other mining areas as well. T ushers will cater the requirement of Limestone from I hnong Limestone Mine (66.98 Ha ML area), Khub I- ha ML &Khub II-4.70 ha ML, Wah-Pynkon Limestone ine- II having 13.58 Ha ML area and DabaSaitthad Limestone			 o. ii & iii- Executive summary of report from Indian Instit ute of Technology (Indian School of Mines), Dhanbad sub mitted to MoEF&CC. The Project Proponent had procured Dozer with Ripper att achment for mining but it could not be used as Limestone is very hard & massive in nature. Thus equipment has not been utilized.
one Deposit having 25 Ha ML area. These crushers we ater the need of SCL cement plants. It also facilitates ding emissions at multiple locations.	iv	The Project Proponent n eeds to explore the possi bility of installing a fixe d/ mobile crusher within the lease area.	The Project Proponent has examined the possibility of inst alling fixed/mobile crusher within the lease area & reply i s as under: Mining lease area is only 25 Hectare, so as to conserve the mineral resource Crusher is located outside the mining lea se area in the Cement plant premises. Common crushers will be operated at Cement plant for Li mestone, received from other mining areas as well. The cr ushers will cater the requirement of Limestone from Lums hnong Limestone Mine (66.98 Ha ML area), Khub I- 4.96 ha ML &Khub II-4.70 ha ML, Wah-Pynkon Limestone M ine- II having 13.58 Ha ML area and DabaSaitthad Limest one Deposit having 25 Ha ML area. These crushers will c ater the need of SCL cement plants. It also facilitates avoi ding emissions at multiple locations.

Particulars	(Rs. In Lakhs)
Project Cost	Rs 37.30 crores
Employment	99
	e.X.

e-Payments

3.3.3. Deliberations by the committee in previous meetings

Date of EAC 1 :14/11/2023

Deliberations of EAC 1 :

The Project Proponent/Consultant presented the KML file to indicate the site features in the study area. The entire mine lease area of 25 Ha is a Pvt. land. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site. The EAC asked about the status of the Mining Plan. The Project Proponent has informed the EAC that the Mining Plan was submitted to Indian Bureau of Mines (IBM) for approval on 06.10.2023. The scrutiny comments have been received from the IBM and Mining Plan is yet to be approved. NH-6 is located at a distance of about 1.0 km on Southern side and Lumshnong Village is located at a distance of about 3km on NE side. General drainage direction is towards west. Lubha River is located on the South Eastern side. The EAC asked about the distance of the International Boundary from the mine lease area. The Project proponent has informed the EAC that India – Bangladesh International Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side.

The EAC asked about the mineral transportation route. The Project Proponent has informed the EAC that the mineral will be transported by road through NH6 to reach crusher. About 0.8km of company's own road and 0.6 km of public road will be used to reach NH6. Total distance to reach Crusher will be about 4.5 km. The EAC asked about the distance of the width of the public road. The Project Proponent has informed the EAC that the width of the public road is about 7-8m. The EAC asked the Project Proponent to physically verify the width of the public road.Further, the Project Proponent has informed the EAC that the crusher is located at the Cement Plant. The EAC also asked the Project Proponent whether there is any possibility of putting up crusher inside the mine lease area to avoid transportation by road from the view point of environment and safety. The Project Proponent has informed the EAC that the entire mine lease area is mineralized zone and crusher at cement plant is also utilized by other mines which leads to put up a another crusher at cement plant. The EAC suggested the Project Proponent to explore the possibility of utilizing mobile crusher at within the mine lease area. The EAC asked about the possibility of transporting the ore through Over Land Belt Conveyor (OLBC). The Project Proponent has informed the EAC that there are elevation issues to lay OLBC and will be explored in future. The EAC noted that a number of mines are going to come up in the study area, the EAC asked the Project Proponent to submit the future year wise production plan to assess the production requirement. The EAC also opined that the Project Proponent needs to explore the possibility of utilizing surface Ripper-Dozer combination along with the hardness of Limestone tested by reputed Institute.

The Project Proponent also informed the EAC that a letter has been obtained from the Office of the Principal Chief Conservator of Forests (HoFF), Meghalaya vide letter dated 1st Feb, 2023 stating that plot of land of 25 ha is non-forest land as per definition of forest in Section 3 (10) of Meghalaya Forest Regulation, 1973 as amended vide Meghalaya Forest Regulation (Amendment) Act, 2012. The Project Proponent has informed the EAC that exploration level is G1. The EAC asked the Project Proponent to relook the life of the mine. The Project Proponent has informed the EAC that maximum elevation is 406 mRL and minimum is 336 mRL. The ultimate level of excavation will be 269 mRL. The depth of the mining will be 137 m bgl from the surface. The EAC opined that the Project Proponent needs to undertake a slope stability study and shall submit the same in the EIA/EMP report. Maximum production capacity of 2.51 MTPA of Limestone will be achieved in the 5th year of 1st five year plan period. At the conceptual stage, 23.54 ha will be under mining area and out of which 3.02 ha will be converted into water reservoir, 20.12 ha will be under bench plantation and 0.40 ha area under roads. The EAC opined that even though Project Proponent is a part of the Regional Conservation Plan, the Project Proponent needs to submit the Wildlife Conservation Plan for conservation of wildlife.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the India – Bangladesh International Boundary is located at a distance of about 9.0 km from the mine lease area on SSW side. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that "all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence". The EAC was of the view that border area is falling within 20 km radius and hence the EAC opined that the NOC from the Ministry of Defence is prerequisite for grant of Terms of Reference (ToR). Based on the discussions held, the EAC deferred the proposal for want of following additional information: -

- i. The Project Proponent needs to submit the NOC from the Ministry of Defence.
- ii. The Project Proponent needs to submit the width of the public road.
- iii. The Project Proponent needs to submit the hardness of Limestone tested by reputed Institute.
- iv. The Project Proponent needs to explore possibility of installing fixed/ mobile crusher within the lease area.

3.3.4. Deliberations by the EAC in current meetings

The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site. The project proponent after explaining the site features on the KML presented the reply of the ADS

points raised during the 22nd EAC Meeting held during 14-15 November 2023. PP stated that they have obtained the NoC from Ministry of Defence vide letter dated 05.04.2024. Further with regard to the use of surface miner PP stated that as advised by the EAC earlier they sent their limestone sample to Indian Institute of Technology (Indian School of Mines), Dhanbad for determination of Moh's hardness along with Compressive strength, Tensile strength. The recommendation of study is given as under:-

- The results of Moh's hardness ranges from 3 to 5. In general, the Moh's hardness is an indirect measure of the tool consumption of the cutting machine, again this is indicative of high tool consumption that may result into more downtime of the surface miner machine on account of tool change if deployed. Therefore, based on the test results it is recommended to avoid deployment of surface miner."
- · It is observed from the test results of UCS of rock samples of Dabba Saitthad Limestone Deposit of 25.00 Ha Mining Lease Area of Star Cement Limited, that the compressive strength has an average value of 47.48 ± 16.2 (/2) which is considered a high value for deployment of Continuous Miner as far as production capacity is considered (Kramadibrata, 1996). At this value the surface miner will be producing at a very low and uneconomical rate."
- Considering the test results of the tensile strength of the rock samples of Daba Saitthad Limestone Deposit of 25.00 Ha Mining Lease Area of Star Cement Limited, the average value is 25.95 ± 3.78 MPa. At this value of tensile strength, the deployment of Surface miner is ruled out. As can be seen that the deployment of surface miner is practically unsuitable beyond 6 MPa of tensile strength of rock."

Based on the aforesaid recommendation of Indian School of Mines Dhanbad, PP requested EAC to allow deep hole drilling & blasting. Further with regard to the possibility of installing fixed/mobile crusher PP stated that Mining lease area is only 25 Hectare, so as to conserve the mineral resource Crusher is located outside the mining lease area in the Cement plant premises. Common crushers will be operated at Cement plant for Limestone, received from other mining areas as well. The crushers will cater the requirement of Limestone from Lumshnong Limestone Mine (66.98 Ha ML area), Khub I- 4.96 ha ML &Khub II-4.70 ha ML, Wah-Pynkon Limestone Mine- II having 13.58 Ha ML area and Daba Saitthad Limestone Deposit having 25 Ha ML area.

In view of the foregoing submission of PP, the EAC asked the PP about the possibility of transporting the ore through OLBC up to the highway, PP informed that they have approached the village head and community members for their consent for making an alternate road for transportation of mineral to completely avoid the village/public road. PP also presented the alternate route to the EAC

Based on the above, EAC recommended the proposal in the 29thEAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya under provisions of EIA Notification, 2006 and its amendments therein with following specific conditions in addition to the standard ToR conditions applicable for the non-coal mining projects-

3.3.5. Recommendation of EAC

Recommended

3.3.6.1. Specific

acti	action plan			
1.	The Project Proponent needs to submit the action plan for year wise backfilling.			
yea	year wise excavation			
1.	The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.			
tota	Il excavation			
1.	The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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.			
land use/land pattern				
1.	The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.			
drone survey				
1.	The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.			
monitor the ambient air quality				
1.	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. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.			
prepare the emp Payments				
1.	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.			
submit the map				
1.	The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.			
asse	assessment of impact			

The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

recycle/re- use of water

1.

1.

The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.

construction of retaining wall

1. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.

greenbelt/affo<mark>restation develop</mark>ment plan

The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.

specific diesel consumption

PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total
excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.

skill development

1.

1. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.

monitor the water quality

^{z-p}ayments

CODI

The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

cumulative impact assessment

The Project Proponent needs to carry out the cumulative impact assessment showcasing the impact
 by considering all peripheral mining activities of the combined mine operation for area towards wildlife sanctuary.

continuous automatic air quality monitoring station (caaqms)

PP shall prepare a Plan for implementation of Continuous Automatic Air Quality MonitoringStation (CAAQMS) at mine site or its vicinity.

location of aaqms

1.

1.

Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.

parameters in surface water quality

Heavy metals including other parameters in surface water quality shall be analyzed and provided in EIA Report. Further, detailed mineralogical and chemical composition of the mineral and percentage of free silica in Air quality and other parameters Arsenic, Lead shall also be analyzed in ambient air quality & to be furnished in EIA/EMP report.

photograph of monitoring stations

The PP while carrying out base line monitoring should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should also submit the original Lab reports of air, water, soil and noise quality and NABL/MoEF&CC certificates of the respective laboratory.

air pollution control equipment (apces)

PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as
part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs.

lng/cng based mining machineries

1. PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.

action plan for prevention of landslide

The PP shall submit an action plan for prevention of landslide and rollouts from the surrounding hillocks, inter alia, including plantation, cribs and gabbions, etc.

hydrological regime of the area

1.

1. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.

quantity of surface or ground water
PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.

environmental management plan (emp)

PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

nabl/moef&cc accredited laboratory

PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.

modeling

1.

1.

The control case and worst-case scenario needs to be demonstrated with controlling factor and
 GLCs values for all the pollutants and it should be clearly mentioned. The input parameters used for the modeling also needs to be submitted in the EIA/EMP report.

schedule<mark>-i species</mark>

The project proponent needs to carry out the study to identify the species including the Schedule-I
species as per Wildlife Act 2022 and prepare the wildlife conservation plan for the available
Schedule- I species. The wildlife conservation plan should cover the impact of mining.

impacts of vibration

The project proponent needs to carry out the Vibration study and submit the impacts of vibration during blasting in the EIA report. Effective measures should be taken to prevent the damage due to fly rock and its impact on the nearby Lumshnong village. Blasting activity shouldn't cause damage to the nearby villages.

public hearing

1.

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 with a timeline for the concerns of the local people in terms of Education, Health-care and Environment.

safety of the school

1. The Project Proponent mentioned a school is at the distance of 1.5 Km from the mine lease area. Therefore, the PP shall ensure safety of the school and also mention for betterment of schools and to facilitate the online education system by providing Wi-Fi connectivity, smart classrooms and desktops/tablets, infrastructure, and environment protection.

impact of earthquake

The impact of earthquake on the mining operation vis-à-vis Safety for the mine be delineated in the EIA report.

the hydro-geological study

1. Since the mine is on the slope, the hydro-geological study including water &its impact of stream on mine & vice versa to be included in the EIA report.

court order

1.

1.

PP should submit an undertaking by way of affidavit as per Ministry's O.M No 3-50/2017-IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 passed in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Lakhpat & Punharajpur Lignite Block by GMDC LAKHPAT & PUNHARAJPUR LIGNITE BLOCK located at KACHCHH,GUJARAT

Proposal For	Art Hick	Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/GJ/MIN/445103/2023	IA-J-11015/29/2023-IA-II(NC M)	21/09/2023	Mining of minerals (1(a))

3.4.2. Project Salient Features

The instant proposal is for Terms of Reference for mining of Lignite and Limestone in Lakhpat & Punharajpur Lignite Block and Limestone mine for production capacity of 4.5 MTPA of Lignite and 29.81 MTPA of Limestone in the mine lease area of 2959.6715 ha by M/s Gujarat Mineral Development Corporation Limited located at Villages Lakhpat, Kaner & Punharajpur, Tehsil Lakhpat, District Kutch, Gujarat.

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

- i. The mine lease area is located between Latitude: 23°44'40.429"N to 23°49'19.872"N and Longitude: 68°43'22.983" E to 68°47'30.417" E. The mine lease area falls under the Survey of India Toposheet No: 41 A/9, 41 A/10, 41 A/13 & 41 A/14 and falls in Seismic Zone-V.
- 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. The Project Proponent has submitted that the Terms of Reference (ToR) was obtained on 22.06.2022 for

Lakhpat & Punharajpur Lignite Block with production capacity 3.0/4.5 MTPA Lignite (Normative/Peak) & 29.81 MTPA Limestone in project area of 2959.6715 Ha. One of the specific condition (i) is that "as per the MoEF&CC's OM dated 24.12.2010, PP to apply the TOR separately for operation of Limestone mine to respective sector under the provisions of EIA, Notification for preparation of common EIA-EMP report". In view of the above, a fresh proposal has been submitted to obtain the Terms of Reference (ToR) for mining of Limestone.

iv. Details of Mine Lease:

S.n o	Prospecting Lic ense/ Letter of I ntent (LoI)/ Gra nt of Mine lease and Lr No	Date of the g rant	Name of the Mineral & (Major/ Mino r)	Period of Gra nt	Granted by	Mine lease a rea in Ha
1.	Order No. MC R-102015-406- CHH1 (Part Fil e) Sachivalaya, Gandhinagar,	25.10.2021	Major Miner al (Limeston e & Lignite)	30 Yea r	Industries and Mines Depart ment	2959.6715

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

Private land	224.9142
Government land	2734.7573
Forest land	Not Applicable
Total Mining lease area (MLA), ha	2959.6715
Private land for crusher, workshop & oth er infrastructure outside the MLA	Nil

vi. Details of Mining plan:

Mining Plan including Progressive Mine Closure Plan (approved by I ndian Bureau of Mines/DMG)	Letter No.	Limestone: MCDR - MPCP0CaFl/7/ 202 3-GNR-IBM_RO_GNR Lignite: 55026-3-2020-MPS	
69	Date	Limestone: 09.08.2023 Lignite: 05.10.2020	
	Mineral & (Majo r/Minor)	Major	
	Mine Lease Area, Ha	2959.6715	
	Validity	5 Year for Limestone.	
Mining Parameters	Quantitative Description		
Methods of Mining	Mechanized Opencast (The limestone bearing overburden will be mined through Surface Miner while Lignite and other waste		

	will be mined through shovel dumper combination.)
Drilling/Blasting	Drilling and blasting will be rarely phenomenon in the whole m ining process throughout the life of the mine. Occasional drillin g and blasting may require to excavate the hard limestone strata which has been reported in the Geological report. In case of dri lling and blasting, spacing and burdens will be limited to 5 met er each. Deep hole blasting with SMS will be adopted. Blasting will be done in the suitable time of the day after proper intimati on.
Geological Reserves	Total Geological Reserve: Gross Geological Reserve - 161.59 Million Tonne and Net geological reserve - 145.43 Million Ton ne for lignite Total Geological Reserve: 736.58 Million Tonne of Limestone
Mineable Reserves	Lignite: 105.52 Million Tonnes Limestone: 562.55 Million Tonnes
Breakup of Total Excavation (Top soil/OB/SB/IB/Mineral Rejects/ W aste, MTPA)	Limestone - 29.81 MTPA Lignite – 3 MTPA Top soil – 0.52 MTPA OB – 118.7672 MTPA
Life o <mark>f mine</mark>	39 years (for Limestone 35 years and for Lignite 39 years) including one year of Pre-mining developmental works.
Mine Bench Height & Bench Widt h	Height of bench: 5m (max) Width of bench: 10m (min)
No. of <mark>Mine Benches</mark>	21 She to she
Existing Depth, m bgl	SPC ODEEN S
Ultimate Depth of Mining, m bgl	Min: 21.92 m, Max: 115.31 m (Limestone) Min: 59 m, Max: 125 m (Lignite)
Ground Water Table, m bgl	Core zone: The post-monsoon water level varies from 1.5 m to 5 m below ground level. In the pre-monsoon period, it varies fr om 3 m to 9 m below ground level. Seasonal fluctuation in wat er level in these bore wells in the core zone varies from 1.3 m t o 3.8 m. Buffer zone: The Post-monsoon water level varies from 1.5 m to 6 m below ground level. In the pre-monsoon period, it varies from 3 m to 9 m below ground level. Seasonal fluctuation in w ater level in these bore wells in the core zone varies from 1.3 m to 3.8 m.
Details of ground water intersectio n	The mining operation will be restricted to 100m depth from the surface level (RL). Depth of water table varies from 452 m to 6 51 m from surface level (RL). Hence, there will be intersection

	of ground water aquifer drogeological study doe uring the aquifer in this n estimated in a tune of through groundwater re er depletion leading to u envisaged.	of ground water aquifer during mining operation. The detail hy drogeological study does not envisage any impact due to punct uring the aquifer in this mine. The ground water inflow has bee n estimated in a tune of 283 MLD. This again will be mitigated through groundwater recharge. Thus net impact of Ground wat er depletion leading to unavailability of the ground water is not envisaged.		
Individual bench slope	80°			
Overall pit slope	26 ⁰			
Details of existing/ proposed Cru her	s Proposed Primary Crush ty	hing – Jaw Crusher o	of 6000 TPH capaci	
Mineral Beneficiation	Not Applicable	-46		
RoM output size	-200 mm			
Transportation details including c pacity of dumper/tipper, mode of ransport and distance	a No. of Dumper of capace t No. of Dumper of capace Mode of transport – Ros Distance – around 10 K Transportation of Lime Km from the Mine, base uest for Proposal). Initially mineral will be mper Capacity for Lime ntial customers within t tation will be planned.	No. of Dumper of capacity 40 Ton -128 and No. of Dumper of capacity 35 Ton – 51 Mode of transport – Road Distance – around 10 Km from project site Transportation of Limestone is presumed in the vicinity of 10 Km from the Mine, based on the response of Limited RFP (Req uest for Proposal). Initially mineral will be transport through dumper via road. Du mper Capacity for Limestone is 40 Ton. Depending on the pote ntial customers within the 10 Km range, conveyor belt transpor tation will be planned.		
Generation of Topsoil/OB & its M anagement during plan period & onceptual period	About 1249.34 M.cum of OB and 12.65 M.cum of Topsoil will be generated. Backfilling will be done over 1675.72 Ha out of which 717.93 Ha will be converted to agricultural land and 95 7.79 Ha will be utilized for plantation. The overburden, excluding the limestone, generated during the mining process shall be utilized for backfilling of the mined-ou t voids. Topsoil generated during the mining process will be sp read over the backfilled areas to make the dumping ground suit able for plantation and agricultural ground.			
Generation of Mineral Rejects/ W aste & its Management during pl n period & conceptual period	A mineral rejects yard will be created in the south-western correr of the Block to stack the sub-graded limestone for future us ge. The overburden, excluding the limestone, generated during the mining process shall be utilized for backfilling of the mined-out voids. Topsoil generated during the mining process will be s read over the backfilled areas to make the dumping ground su able for plantation and agricultural ground.		south-western corn estone for future usa enerated during the ing of the mined-ou g process will be sp umping ground suit	
Total water requirement	1325 KLD	Fresh water	50 M ³ /day	

		Treated water	32 M ³ /day		
Source	Groundwater 50M ³ /day, Dewatering water 814 M ³ /day & Mine pi t rain water collection 461 M ³ /day. Deep tube wells will be installed at site for drinking water with ne cessary treatment plant. Potability of water will be analyzed in qua rterly basis. In the initial years, water for dust suppression, plantati on use and workshop uses will be catered from the mine pit water of nearby GMDC mines. With progress of the mine, accumulated pit water will be stored and utilized for the Plantation, Dust Suppr ession and workshop usage.				
Permission for withdrawal/ inte rsection along with details of gr ant and its validity	Requisite approvals from CGWA will be obtained before commen cement of mining operation.				
Particulars	Particular's Name	Distance & Dire	ections		
Village	Lakhpat	0.5 Km in N dir	rection		
Town	Nakhatrana	70 km in SW di	rection		
Highway	SH 42	Passing through	n the block		
Interstate Boundary	None within 10 km radius	-	SS		
Railw <mark>ay Station/Rail</mark> way line	Naliya & Bhuj Railway Sta tion	61 Km in south 110 km in south	ern direction neastern direction		
Water Bodies	 P1, Eastern side of Punhar ajpur village Check da m for Villagers. P2 Northern side of Punhar ajpur village Pond with in the lease area. P3 NW side of Punharajpu r village Pond within th e lease area One Seasonal nallah (Trib utary of Kali River) is p assing within the lease area. It will be left undi sturbed during the mini ng operation. Kali Nadi Kori Creek Korawadi Nadi Kapurasi Nadi 	Within Core Zo Within Core Zo Within Core Zo 0.3 Km in W 3.3 Km in N 6.3 Km in SE 9.7 Km in WSW	one one V		
Forest	₽ranpar Rakhal RF •Akri RF	1.9 Km in ESE 6.7 Km in SE			

	Uk ≪h Mι €a	her RF anot RF idhvay RF duli RF			7.1 Km in E 8.5 Km in SSE 8.9 Km in SW 9.8 Km in ESE
Forest Land/ Protected Area/ Env nmental Sensitivity Zone	viro	Yes/No		Details ncerne date of	s of Certificate/letter issued by the co d Department mentioning the Lr no, f grant and remarks
Forest Land within the mine lease ea and (if yes) status of Forest Cl ance	e ar lear	No		No Foi rea.	rest land involved in the mine lease a
National Park No		C No		Naraya x. 8.8 1 lease a	an Sarovar Wildlife Sanctuary appro km in SSW direction from the Mine rea.
Wildlife Sanctuary	Y	R No	0	Naraya x. 8.8 lease a	an Sarovar Wildlife Sanctuary appro km in SSW direction from the Mine rea.
Elephant/Tiger Reserve		No	1	Res .	The second secon
Eco-S <mark>ensitive Zone(</mark> ESZ) /Eco-Sensitive Area (ESA)	ens	No		Eco- S he Min	ensitive Zone approx. 8.2 km from t ne Lease area.
Coastal Regulation Zone (CRZ) Yes		Yes	3	0.605 1	km from the block
Schedule-I species (No.s and nam f schedule-I species with authenti ed letter)	icat	No Protects of	15	There are of 8.3 he bloc Conser ubmitte	is one wildlife sanctuary at a distanc 8 km in the southern direction from t ck boundary. Site Specific Wildlife rvation Plan has been prepared and s ed to concern authority.
Wildlife Conservation Plan	/	No		Site Sp as been nt auth	pecific Wildlife Conservation Plan h n prepared and submitted to compete pority.
Proposed area for green belt/plan saplings proposed	tatio	n and no. of	Ar No	ea: 1377 . of Sap	¹ .9 ha. lings: 34,44,750
Budget for green plant & plantation till the end of life of mine.		ll the end of	45	Lakhs fo	or first five year
Budget for nursery			1		
Details of existing plantation and	Details of existing plantation and its survival rate		Su	rvival Ra	ate: 80%
No. of tree cuts in the mine lease area and compen satory afforestation		Detailed tree enumeration will be provided in E IA. CA not applicable.			

Particulars for Green belt/plantation		Area covered (in Ha)			
7.5 m barrier & non-mineralized zone		11.9 ha			
Gree ump t. 717.	Greenbelt created in ha: 1377.9 ha., the bifurcation is 957.79 ha on backfilling, , 98.62 ha on stacks/ c umps, 308.19 ha on virgin land and lastly near utility services 13.30 ha including peripheral greenber t. 717.93 ha will be developed for agriculture activities.				
Base	Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)				
Peri	od of baseline data collection	March to May 2024			
Seas nter)	on (Summer / Pre-monsoon / Post-monsoon	n / Wi Summer Season			
R & etail	R d s There is no homestead PAF within within the Block. Compensation in Policy will be undertaken and imple	the Block. However, there are 196 PAF and 798 PAP accordance with the prevailing Norm of State R & R emented by M/s GMDC for the land losers.			
Cou	rt C <mark>ase, No and its p</mark> resent status No	court case is pending against the project.			
S. N o	ADS Point	Reply by Project Proponent			
1.	The Site visit report of the sub-committ ee	The Site visit report of the sub-committee has been submitted by the Project Proponent.			
2.	Since the mine site is located within 20 km from seaboard frontier, Project Prop onent shall submit No Objection Certifi cate from Ministry of Defence for consi deration of the instant project for Terms of Reference (ToR).	Project Proponent had approached to Ministry of D efence, New Delhi for obtaining a No Objection Ce rtificate. As per the Project Proponent's interaction with AS O (Policy & Planning), Ministry of Defence (MoD) (IAST: Rakshà Mantralaya), New Delhi. This propo sal must be directly moved by MoEF&CC, New De lhi to MoD (IAST: Raksha Mantralaya), New Delhi being confidential in nature. In this regard, Project Proponent has submitted a re quest letter to MoEF&CC on dated 19.12.2023.			
3.	The Project Proponent needs to clearly j ustify the water balance and also to expl ain that how the requirements of freshw ater will be met.	The water requirement was initially 1940 KLD whi ch has been reduced to 1325 KLD (reduction of 3 2% or 615 KLD) after carrying out comprehensive hydrogeological survey, ground water modelling an d re-visiting the water balance. Water balance diagram has been submitted by the P roject Proponent. As per the diagram the total water requirement is 1325 KLD which includes Ground w ater requirement (50m3/day), dewatering quantity (814 m3/day) and Mine pit rainwater collection 461			

	m3/day.			
The Project Proponent has submitted the following point-wise reply w.r.t. the observations of site vireport of the sub-committee:				
S.No	D. Observation of the Sub-Committee	Reply by Project Proponent		
1.	The PP shall submit the comprehensive material balance with regard to the annual production of t he both minerals, overburden/waste, top soil gen erated, depth of mining, transportation of minera ls mined out yearly, quantity to be stocked for th e first five years. The excavation data should mat ch when compared with the mining plan for both minerals i.e. Lignite as well as Limestone.	PP has provided comprehensive mate rial balance with regard to the ann ual production of the both mineral s, overburden/waste, top soil gener ated, depth of mining, transportati on of minerals mined out yearly, q uantity to be stocked for the first fi ve years. The excavation data has been matched with mining plan fo r both the minerals. A detail of the same is has been submitted.		
	RIVE	Lignite: All mined out Lignite will be dispatched to the consumers for co mmercial use.		
	P. Comp. Contraction of the state of the sta	Limestone: Initially, all the mined out Limestone will be stacked for the first five years. In the meantime, GMDC h as invited EOI (Expression of Interes t), to understand the interest of cement companies to utilize the limestone in t he vicinity of the mine. Based on the r esponse GMDC has rolled out Limite d RFP (Request for Proposal) for the i nterested parties for their participation in Long-term Supply Agreement (LS A) for limestone.		
2.	The PP informed that they will by using SH 06 f or transportation purpose along with NH 41, acc ordingly, PP shall submit the detailed transportat ion route for the proposed transportation of mine d out minerals.	 As mentioned above, mined out Ligni te will be dispatched to the consumers for commercial use. Transportation of Limestone is presumed in the vicinity of 10 Km from the Mine, based on the response of Limited RFP (Request for Proposa 1). Depending on the potential customers within the 10 Km range, conveyor belt transportation will be planne d. 		
3.	PP shall also undertake the carrying capacity stu dy of the existing road to indicate its viability alo ng with its pollution potential.	Details of the Carrying Capacity to be incorporated in the EIA Report, post f inalization of the Long-term Supply A		

		greement (LSA) with potential consu mers.
4.	The PP shall submit the detailed timeline for shif ting the pond outside the mine lease area. The ca pacity of the existing pond and the proposed pon d along with its location needs to be provided by the PP.	 There are three pond within lease area i.e. P1, P2, P3. Pond P1 Catchmen t area of 281250 m2 will be used a fter 25th year during the mining o peration and that will be a part of 410.19 ha water body at the end of life of mine. Project proponent will not disturb P2
	e-KYC BIYF	 & P3 Pond during the mining oper ation. As part of its CSR Activities, GMDC has initiated Development and rej uvenation of check dam at Baiyav o village under the Mission Amrit Sarovar with total administrative a pproval of Rs. 43,40,000/
	Z Jack the F	 The deepening of the Sanavala check dam on Khali river at Baiyavo vill age holds significant potential for enhancing the water needs of the r esidents in Baiyavo and Punrajpur villages. The check dam work is e xecuted by the Office of Deputy E xecutive Engineer, Nakhatrana, K utch. The CSR project's execution promises
	P Comotects of She 15 CPC CREE	to alleviate water scarcity in the re gion and ensure sustained socio-ec onomic well-being for Baiyavo an d Punrajpur villages in the Lakhpa t Block.
5.	PP shall undertake green belt plantation alongsid e the lease boundary and virgin area plantation.	Project proponent will develop greenb elt alongside the lease boundary and v irgin area. Around 30,000 plants will be planted in first five years during th e mining operation. Details is given b elow:
		YeaGreeAreaNumbeExpEstimatrnbeltproprofplaecteedExplocatiosedntsprodSuenditurontobeposedrvivecovealRredate(Ha)(%)1stSafet2.4600080%900000e2ndSafet2.4600080%900000

		y Zone 80% 3rd Safet 2.4 6000 80% 900000 y Zone 80% 900000 900000 4th Safet 2.4 6000 80% 900000 y Zone 900000 900000 900000 y Zone 900000 900000 5th Safet 2.3 6000 80% 900000 y Zone 900000 900000 900000 y Zone 450000 450000
6.	PP shall also submit its action plan for mineral u se in case it is unable to set up its Cement plant within next 5 years.	Based on the response, GMDC has rol led out Limited RFP (Request for Pro posal) for the interested parties for the ir participation in Long- term Supply Agreement (LSA) for limestone.
7.	PP informed that mining activity will intersect gr ound water, accordingly PP shall undertake hydr ological study to determine whether any sea- wat er ingress will occur or not.	 PP had appointed CGWA accredited consultant Vardan Environet (Cer tificate No. CGWA/RGI/003) to u ndertake a Comprehensive Hydro geological Report with ground wa ter modelling. The detail Hydrogeological Modellin g Study report concludes that poss ibility of sea water ingress is rule d out. Detailed Hydrogeological S tudy report has been submitted by the Project Proponent.
8.	PP shall obtain necessary permission/NoC from Archaeological Department for mining in the nor thern side of lease boundary that is in close vicin ity to Lakhpat Fort.	GMDC shall obtain the necessary per mission/NoC from Archaeological De partment for mining in the northern si de of lease boundary that is in close vi cinity to Lakhpat Fort. The application process is initiated. Pr oject proponent will submit the necess ary permission/NOC at the time of su bmission of EIA Report.

xv. Change of Environmental Consultant: The Project Proponent vide letter dated 11.03.2024 requested to the MoEF&CC for change of Environmental Consultant from M/s Centre for Envotech and Management Consultancy Pvt. Ltd. to M/s Vardan Environet.

xvi. Details of project cost and employment:

Particulars	(Rs. In Crore)				
Project Cost	Rs. 1037.436 Crores				
Employment (No.s)	1000				



Deliberations of EAC 1 :

The Project Proponent/Consultant has presented the KML file to indicate the site features in the study area of 10 km radius. The Project Proponent has informed the EAC that the initially mining lease was granted over an area of 2973 ha and then the State Govt has reduced the 14 ha of forest land and granted the Letter of Intent (LoI) over an area of 2959.6715 ha. A State Highway is passing within and adjacent to the mine lease area. No Villages located within the mine lease area. Nala is located about 200m on the western side. Kori Creek is situated at a distance of 1 km towards Northern side. This region receives an annual rainfall of about 200-300 mm. The project site does not fall under CRZ area. Lakphat Fort is located at a distance of about 200m from the mine lease area on the northern direction. The instant mine lease area is located at a distance of 8.8 km from Narayan Sarovar Wildlife sanctuary and 8.2 km from Eco Sensitive zone of Narayan Sarovar Wildlife sanctuary which is outside the Eco Sensitive zone. No forest land is involved in the mine lease area. India-Pakistan International Boundary is located about at a distance of 40 km towards NW. The EAC observed that on viewing the KML file, CRZ area is found to be on northern side of the mine lease area. The Project Proponent has informed the EAC that CRZ area is outside the mine lease area. The EAC reiterated the Ministry of Defence letter dated 08.05.2023 regarding security considerations for construction activities/other activities in Border areas/other areas wherein it has been mentioned that "all activities connected with mining within 20kms from all the borders including seaboard frontier should be planned in consultation with Ministry of Defence". The EAC opined that the NOC from the Ministry of Defence is prerequisite for grant of Terms of Reference (ToR).

The Project Proponent has informed the EAC that the instant proposal is for mining of Lignite and Limestone. Terms of Reference (ToR) have been already obtained from the Coal Mining Sector for Lignite mining on 22.06.2022. One of the specific condition (i) of the ToR is that "as per the *MoEF&CC's OM dated 24.12.2010, PP to apply the TOR separately for operation of Limestone mine to respective sector under the provisions of EIA, Notification for preparation of common EIA-EMP report*". In this regard, a fresh proposal has been submitted to obtain the Terms of Reference (ToR) for mining of Limestone. This Limestone has been occurring as an over burden and has to be excavated out. Maximum proposed production capacity of Limestone is 29.81 MTPA. Expression of Interest (EoI) has been published for putting up cement plants. The EAC asked about the plan for transportation. The Project Proponent has informed the EAC that they are exploring the options to put the Cement Plant close to the Limestone mine and will also explore the possibilities of transporting through conveyor belt and if not possible proper mitigation plans will be devised to minimize the impact due to road transportation. The Cement Plant will commence between during the year 2026-2029. The feasibility of transportation will be covered in the EIA/EMP report since the EoI is in 2nd Stage of tendering.

The EAC asked the Project Proponent that when will the Lignite production will commence. The Project Proponent has informed the EAC that the Lignite production will commence in the year 2025. The EAC asked the Project Proponent that whether huge area is available to accommodate the Limestone. The Project Proponent has informed the EAC that during the first five-year plan, the maximum production of Limestone will be 14.80 MTPA. The EAC asked the Project Proponent to explore the possibility of the reduction of the requirement of water consumption. The EAC also asked the Project Proponent to submit the action plan for exploration program in the EIA report.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that there are other mines also present in the study area. The EAC observed that the Lakphat Fort is located at a distance of about 200m from the mine lease area on the northern direction. The proposed capacity of Limestone is huge quantity. The EAC noted that the maximum proposed production capacity of Limestone of 29.81 MTPA will be achieved in the 12th year as per the then approved mining plan. The Project Proponent did not finalize the mode of transportation. The EAC was of the view that rainfall in the region is very minimal and there will be intersection of ground water aquifer during mining operation. The area is already starved of freshwater. The EAC opined that this will create further complications. The EAC observed that since there will be no overburden, backfilling the void and the closure of mine remains a challenging task. The EAC noted that a Nala is located about 200m on the

Western side and Kori Creek is situated at a distance of 1 km towards Northern side and there will likely chance of sea ingress. The EAC also noted that the mine lease area is located in Seismic Zone-V. Thus the EAC was of the view that there is a need to ascertain the ground reality w.r.t water bodies in the vicinity of the mine lease area, Lakphat Fort (200m, N), handling, management and transportation of Limestone, traffic congestion, water balance and source of water, plan for final closure of mine, sea ingression, cumulative impact and hazard management. 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 opined that the Ministry may constitute a sub-committee and submit its report to enable the committee to take a decision on the proposal. Therefore, the EAC **deferred** the proposal and was of the view that the instant proposal may be considered only after submission of the following additional information: -

i. The Site visit report of the sub-committee.

ii. Since the mine site is located within 20 km from seaboard frontier, Project Proponent shall submit No Objection Certificate from Ministry of Defence for consideration of the instant project for Terms of Reference (ToR).

iii. The Project Proponent needs to clearly justify the water balance and also to explain that how the requirements of freshwater will be met.

3.4.4. Deliberations by the EAC in current meetings

The project proponent after explaining the site features on the KML presented the reply of the ADS points raised during the 21st EAC Meeting held during 18-20 October 2023. PP also provided the point wise compliance of the site visit report of the sub-committee. Upon submission of the reply by PP, the EAC asked the PP whether they have finalized the transportation route for the mined out mineral. PP stated that transportation of Limestone is presumed in the vicinity of 10 Km from the Mine, based on the response of Limited RFP (Request for Proposal). EAC was of the opinion that PP should atleast include the most probable route that it may follow for transportation in the EIA/EMP along with the carrying capacity study.

Further, EAC observed that plantation proposed by the PP was inadequate and accordingly, the committee advised the PP to revisit their plantation programme by incorporating plantation of 2500 plants per hectare. EAC also noted that Lakhpat Fort is located near to the mine site and opined that PP shall seek no objection certificate from ASI in this regard. The EAC again reiterated that the mine lease is located within 20km from the seaboard frontier and as such PP needs to obtain the NoC from Ministry of Defence.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Limestone in Lakhpat & Punharajpur Lignite Block and Limestone mine for production capacity of 29.81 MTPA of Limestone in the ML area of 2959.6715 ha by M/s Gujarat Mineral Development Corporation Limited located at Villages Lakhpat, Kaner & Punharajpur, Tehsil Lakhpat, District Kutch, Gujarat under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions to be followed:

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Terms of Reference

year wise excavation

1. The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.

total excavation

1.

1.

1.

The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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

land use/land pattern

be submitted

1. The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.

survey of the mine lease area

1. The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.

ambient air quality and noise level

The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.

emp considering the scenario of pollution

1. 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.

transport route

The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.

central ground water authority

The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.

recycle/re- use of water

1. The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified

by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.

engineering design

1.

1.

1.

1.

1.

1.

1. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.

greenbelt/afforestation development

The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.

project affected families (paf)/project displaced families (pdf)

The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF)/Project Displaced Families (PDF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. PP need to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. PP also needs to submit the possession certificate and timeline for acquiring the land. Further, PP needs to submit the map demarcating the purchased land and nonpurchased land if any at the time of appraisal of EC.

skill development plan

The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.

langelier saturation index

The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

no objection certificate for mining from asi

PP shall submit no objection certificate for mining from ASI with regard to the Lakhpat Fort which is located at a distance of 200 m from the mine lease area in the northern direction.

public hearing

PP shall undertake the public hearing for Common EIA-EMP reports on both operations i.e lignite mine and limestone and submit the final EIA-EMP report to respective sectors simultaneously for their appraisal in accordance with the MoEF&CC OM dated 24.12.2010. Public Consultation,

clearly indicating both the minerals Lignite as well as Limestone shall be conducted through the concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal. All the issues should be incorporated in EIA along with its time bound action plan and budgetary provision. Also the issue raised in public hearing held earlier should also be addressed with time line action plan and budgetary provision in EIA/EMP report.

continuous automatic air quality monitoring station (caaqms)

PP shall prepare a Plan for implementation of Continuous Automatic Air Quality MonitoringStation (CAAQMS) at mine site or its vicinity.

air quality data

Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be
planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.

hydrological regime

1. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.

boundary of the mine

The impact of mine operation on the river bodies flowing within the boundary of the mine with its
 mitigation measures adopted should be clearly spell in the EIA/EMP report with flood plain protection measures.

lng/cng

1.

PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.

environmental cost benefit analysis

1. Project proponent to prepare Environmental Cost Benefit Analysis for the project in EIA/EMP Report.

compensatory afforestation plan

The Project Proponent needs to undertake the enumeration of the plant species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.

ecology restoration plan

1.	The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
min	ing technology/methodology
1.	PP shall provide the details of mining technology/methodology proposed to be adopted for Non- coal mining operations and its associated environmental benefits of using from Climate Change perspective.
elep	phants and tiger corridors.
1.	PP shall submit letter from Principal Chief Conservator of Forest, State Government that the area does not falls under any authorized Elephants and Tiger corridors.
stuc	ly on flora and fauna
1.	The Project Proponent needs to submit the detailed scientific study on flora and fauna and also highlight the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
cou	rt cases
1.	PP to submit the status of any pending court cases or disposed of cases pending before different adjudicating authority related to the present project/ mine site.
wild	llife conservation plan
1.	PP shall prepare a wildlife conservation plan in consultation with the local forest department focusing on the marine eco-system present at the mine site.
den	narcation of the boundary
1.	The Project Proponent needs to submit the proof of the demarcation of the boundary pillars fixed on the ground.
plas	stic waste management
1.	PP shall submit the action plan to adhere the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
no o	objection certificate
1.	The ToR shall be granted upon the submission of the No Objection Certificate from Ministry of Defence.
acti	on plan
1.	The Project Proponent needs to submit the action plan for year wise backfilling.

3.5.1. Details of the proposal

Regularization of existing EC under the provision of EIA Notification 2006 and in compliance of MoEF&CC Not ification S.O.1530(E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project in the Mine Lease Area – 280.7686 Ha with the Production Capacity 42000 TPA of M/s Gujarat Mineral Development Corporation Limited located at Village –Balachod, Mothala, Khandai, Tehsil Abdasa, District - Kutch, Gujarat by GUJARAT MI NERAL DEVELOPMENT CORPORATION LIMITED located at KACHCHH,GUJARAT

Proposal For		Fresh EC				
Proposal No	File No	Submission Date	Activity (Schedule Item)			
IA/GJ/MIN/448536/2023	IA-J-11015/150/2018-IA-II(NCM)	10/01/2024	Mining of minerals (1(a))			

3.5.2. Project Salient Features

The instant proposal is for Environmental Clearance under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 23°13'17"N 23°15' 58" N and Longitude: 69°07'24"E 69°10' 41"E. The mine lease area falls under the Survey of India Toposheet No: 41 E/4 and falls in Seismic Zone V as per IS-1893 (Part-1)-2002.

iii. Details of previous Environmental Clearance (EC): -

a. The Project Proponent obtained Environmental Clearance (EC) vide Lr no. J-11015/131/2005-IA II(M) dated 08.12.2005 for production capacity of 42,000 TPA of Bauxite over an area of 299.40 ha under the EIA Notification, 1994.

iv. Details of Terms of Reference (ToR):

a. The Project Proponent obtained Terms of Reference (ToR) vide Lr.No: IA-J-11015/150/2018-IA-II(NCM) dated 18.04.2022 for Mothala Balachod Bauxite Mining Project for the Production Capacity of 42,000 TPA of Bauxite in the mine lease area of 280.7686 Ha under MoEF&CC Notification S.O.1530(E) dated 6th April 2018.

v. Details of Mine Lease:

- a. The Project Proponent submitted that initially mining lease was granted by the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G58/703/CHH dated 12.01.2006 for mineral Bauxite over an area of 299.40.05 ha for the period of 30 years.
- b. Then, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH dated 02.02.2007 revised and the granted the mine lease area for 280.76.86 ha. The lease agreement was thereof executed on 07.03.2007.
- c. Further, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH have extended the lease period up to 06.03.2057.

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

Private land

Government land			280.7686 Ha		
Total Mining lease area (MLA)			280.7686 Ha (Government Waste L and)		
Review and updation of Mining P lan along with Progressive Mine Closure Plan approved by Indian Burreev of Mines (IBM) Condhin	Letter No.	Letter No. Approved from IBM Gandhinagar vide o. 684(4)(1)(MP- 345(117)/2021-22 GNR/1339			
agar.	Date	13/08/202	1		
	Validity	31/03/2020	6.		
Mining Parameters	Quantitative]	Description	Ca		
Bench Height	3 m				
Bench Width	3 m	V F			
Method of Mining	Semi Mechani	zed Open Ca	ast Mining		
Individual bench slope	70^0 from the v	rertical	12		
Overa <mark>ll pit slope</mark>	370		\$50		
Drilli <mark>ng/Blasting</mark>		ZB)			
RoM output size	9600 MT		Children and Child		
Life of mine	49 Years	She 15 Pro			
Transportation details	Dumpers	DEEN	je se		
Dumpers capacity	17tonnes	RE	- OLES		
Mineable Reserves	20,62,589 Ton	ines (as on 0.	1.04.2021)		
Individual bench slope	70° from the v	ertical			
Ultimate depth of mining	5 mbgl				
Groundwater level	15-20m bgl				
Groundwater intersection	No groundwate	er intersectio	on		
Overall pit slope	37°				
Details of existing and proposed	There is no proea.	oposal to ins	tall crusher within the mining lease ar		

Mineral beneficiation	There will be no mineral beneficiation activities within the mine lease area.						
Transportation details	The graded bauxite ore is being transported from Mothala - Bala chod Bauxite Mine to Gujarat Credo Mineral Industries Ltd and allied industries through thereby SH-49						
Dumpers capacity	17tor	nnes					
Generation of Topsoil/OB & its Management during plan period & conceptual period	There ring t	There will be no generation of Overburden & Mineral rejects du ring the plan period (2021-22 to 2025- 26).					
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Topsoil generation in current plan period (2021-22 to 2025-26) i s 16173 cumand shall be disposed of by means of stacking or by backfilling in mine voids & use in development of green belt res pectively.						
viii. Nearest village / town/ highway/railway	station	/ water bodies					
Particulars	~ 4	Particular's Name	Distance & Directions				
Nearest Village/Town	Le.	Balachod Nani	0.5 km in East direction				
Nearest Highway	1	SH 49	6.47 Km/ S				
Railway Station		Bhuj	53. <mark>90</mark> Km/ E				
Nearest Air Port		Bhuj	51.88 Km/ E				
Nearest Reserved/Protected forests	1. 2. 3. 4.	Open Mixed Jungle Wamoti Reserve Forest Mothala Reserve Forest Naranpar Reserve Forest	Adjacent/W 5.17 Km, /N 7.15 Km/ SSW 6.34 Km/E				
ix. Water requirement		- UN-	Ĩ				

	Total water requirement	32 KLD	Fresh water	32 KLD
		Paymen	Treated water	-
	Source	Existing water s	supplier through mobile tanke	ers.
	Permission	NA		
	Additional information (if any)	No additional v Moreover, rain ed for dust supp future also.	water requirement envisaged water accumulated in pits, if pression and this will be conti	in this project. any, is being us inued as such in
x. Prese	ence of Environmentally Sensitive areas ir	the study area		

Forest Land/ Protected A rea /Environmental Sensi	Yes/No	Details of Certificate /letter/Remarks

tivity Zone						
Forest Land	No	The Project Proponent submitted the letter from the Fores				
National Park	No	er dated 27.12.2023 stating that the site is adjoining to fore area. Applicant is required to do mining by keeping 50-met				
Wildlife Sanctuary	No	 Applicant is required to do mining by keeping 30-meter distance from forest area as per Chief Conservator of Fores Wildlife, Gujarat State, Gandhinagar's letter WPS/32/B/ 11 55- 62/99-2000 Date:30/12/1999. Project Proponent reported that there is No National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, within he 10 km radius study area. The nearest wildlife sanctuary is Great Indian Bustard Sanctuary is about 44.50 km in West correction from project site. 				
Eco-Sensitive Zone (ES Z)	No					
Coastal Regulation Zone (CRZ)	No	Not Applicable				
Schedule-I species (No.s and name of schedule-I s pecies with authenticated letter)	Yes	Project Proponent submitted that the Deputy Conservator Forest, Kutch West Division vide Lr.No: B/LAND/T-11/43 5/2023-24 dated 13.12.2023 mentioned that following Schule - I species are observed in a study area of 10 km radius ch as Peafowl (Pavo cristatus), Chinkara (Gazella bennetti Indian Monitor Lizard (Varanus benghalensis),Leopard (Pa herapardus), Striped Hyena (Hyaena hyaena), Jungle Cat (F is chaus), Honey Badger(Mellivoracapensis) and India croo dile (Crocodyluspalustris).				
Wildlife Conservation Pl an	Yes	Site Specific Biodiversity Conservation Plan submitted to the PCCF & Chief Wildlife Warden, Gandhinagar vide Letter o. GMDC/ENV/140/2023-24 dated 18.11.2023 for approval				
nbelt/plantation Details		CAC CREEN ST				
Proposed area for green belt	t/plantation	 Existing: 3.94 Ha (4,310 no. of saplings) Proposed 2.5Ha (3,000 no. of saplings during Plan Perd) Total: 6.44Ha during end of plan period Total Green Beat the end of life of mine will be 10.00Ha. 				
Budget for green plant& pla e end of life of mine.	antation till	th 4.0 Lakhs				

xii. Baseline detail

 Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)

 Period of baseline data c ollection

 Baseline Monitoring studies is being already carried out during Winter S eason: Period (1st Dec. 2019 to 29th Feb. 2020) and Additional one mont h baseline monitoring 1st May 2022 to 31st May 2022) - Summer Seaso

Season (Summer / Pre-m n). onsoon / Post-monsoon / Winter)

Details of Baseline data (1st Dec. 2019 to 29th Feb. 2020-Winter Season) and revalidation of baseline data (1st May, 2022 to 31st May, 2022- Summer Season) as mentioned below:

S r. N	Location			PM ₁ 0	PM _{2.} 5	SO ₂	NO ₂	СО	Ozone	NH ₃
0.				g /m ³	g /m ³	g /m ³	g /m ³	mg/m	µg/m ³	µg∕m 3
1	Project Site, Blo ck-I	Dec, 2 019 – Feb, 2 020	Mi n- M ax	58.0 - 75. 5	18.5- 26.3	11.7- 17.6	17.9- 25.3	0.351 -0.475	8.3 – 12.2	7.6 – 11.5
			98 ^t h	74.9	26.0	17.4	24.8	0.469	12.0	11.3
	K K K	May, 2022	Mi n- M ax	58.5- 72.4	21.4- 27.4	10.1- 15.3	14.9- 19.2	0.323- 0.401	7.9-1 0.4	6.7- 9.2
			98t h	67.5	27.2	15.2	19.1	0. <mark>39</mark> 9	10.3	9.1
2	Project Site, Blo ck-II	Dec, 2 019 – Feb, 2 020	Mi n- M ax	61.9- 78.2	19.7- 34.0	10.2- 16.1	16.2- 23.0	0.241- 0.520	6.7-1 3.0	7.7-1 4.2
		ne	98 ^t h	77.0	33.4	15.7	23.0	0.514	12.9	13.8
		May, 2022	Mi n- M ax	58.5- 72.4	22.3- 31.4	9.5-1 3.4	14.2- 19.7	0.264- 0.348	7.4-9. 5	6.6- 9.6
			98 ^t h	71.6	31	13.3	19.5	0.346	9.5	9.6
3	Khanpar	Dec, 2 019 – Feb, 2 020	Mi n- M ax	49.4- 68.9	16.8- 22.9	9.4-1 5.1	8.9-1 3.9	0.242- 0.308	7.5-1 2.4	5.9- 8.5
			98 ^t h	67.8	22.8	14.8	13.6	0.306	12.0	8.4

		May, 2022	Mi n- M	50.6- 65.9	16.4- 23.6	7.7-1 0.7	12.2- 16.9	0.237- 0.301	6.1-8. 8	6.1- 7.8
			ax	65.9	23.6	10.7	16.9	0.301	8.8	7.8
			98 ^t h	65.0	23.4	10.6	16.8	0.300	8.8	7.8
4	BalachodNani	Dec, 2 019 – Feb, 2	Mi n- M	57.7- 76.6	19.3- 26.1	6.1- 9.7	16.6- 23.4	0.178- 0.269	7.5-1 4.1	4.9- 9.2
		020	98 ^t h	75.5	25.9	9.4	23.0	0.263	14.0	9.0
		May, 2022	Mi n- M ax	48.1- 71.1	18.1- 26.3	6.8- 9.7	15.4- 20.6	0.254- 0.312	7.6-1 2.1	7.3- 9.6
	k/y	2	98 ^t h	70.7	26.2	9.6	20.4	0.309	12	9.6
5	Mothala	Dec, 2 019 – Feb, 2 020	Mi n- M ax	61.2- 85.1	17.3- 26.6	6.6- 9.5	11.4- 17.2	0.246- 0.371	8.8-1 5.8	6.1-1 1.6
	eCo		98 ^t h	82.2	25.7	9.2	17.0	0.358	15.6	11.2
	mplie	May, 2022	Mi n- M ax	63.8- 72.4	22.8- 33.4	11.5- 17.1	16.4- 21.6	0.274- 0.572	9.6-1 3.4	7.9-1 1.5
			98 ^t h	72.2	33.2	17.0	21.5	0.563	13.2	11.5
6	Bhawonipur	Dec, 2 019 – Feb, 2 020	Mi n- M ax	53.3- 67.5	16.7- 23.6	7.3-1 0.9	12.6- 17.5	0.240- 0.313	8.1-1 2.1	4.7- 7.8
			98 ^t h	67.0	23.3	10.6	17.0	0.308	11.9	7.4
		May, 2022	Mi n- M	51.7- 67.7	20.3- 26.2	8.3-1 1.2	12.4- 15.3	0.213- 0.321	6.9-9. 5	6.4- 8.5

				av								
				ал								
				98 ^t h	67.4	26.1	11.1	15.2	0.3	16	9.5	8.4
7	WamotiM	oti	Dec, 2 019 – Feb, 2 020	Mi n- M ax	59.0- 80.4	20.3- 28.3	9.0-1 3.1	10.8- 17.2	0.2 0.3	60- 36	6.7-9. 7	5.4- 8.5
				98 ^t h	79.3	27.7	13.1	16.8	0.3	30	9.6	8.5
			May, 2022	Mi n- M ax	58.7- 71.9	23.6- 30.2	10.8- 16.1	13.5- 20.8	0.3 0.3	24- 73	8.4-1 2.8	8.2-1 0.3
				98 ^t h	71.7	29.9	15.9	20.5	0.3	71	12.7	10.2
8	8 Bhimpar		Dec, 2 019 – Feb, 2 020	Mi n- M ax	41.8- 66.3	14.8- 22.4	9.5-1 4.2	13.9- 19.6	0.2 0.3	99- 59	7.5-1 1.4	6.4-1 0.3
				98 ^t h	65.6	22.4	14.2	19.3	0.3	53	11.3	9.9
			May, 2022	Mi n- M ax	52.3- 66.1	18.7- 24.5	9.3-1 2.2	13.5- 17.4	0.2 0.3	38- 11	6.8-9. 2	5.4- 7.7
			nce	98 ^t h	65.4	24.4	12.1	17.4	0.3	11	9.1	7.7
		CPCB S	Standards	6	100 (24hr)	60 (2 4hr)	80 (2 4hr)	80 (2 4hr)	2 r)	(8h	100 (8 hr)	400 (24hr)
B	. Noise Lev Febru	els: Det ary 2020	tails of An 0) are as m	nbient nention	Noise L led below	Levels for v:	the Per	iod from	1 st]	Dece	mber 201	9 to 29 th
Sr. No. Monitoring Location				ations			Equiv	alent Noi	se Le	evel		
Leq _{Day} Leq _{Night}												
Res	idential Are	a					·					
	•	Balac	hod Nani				52.4			42.	9	
L												

•	Mothala	54.5	37.8
CPCB Standa	urds dB(A)	55.0	45.0
Commercial A	Area		
•	Khanpar	62.5	49.5
•	Nr. SumrasarTalav	55.2	40.6
•	Bhimpar	58.9	47.9
CPCB Standa	rrds dB(A)	65.0	55.0
Silence Zone	RIV	ES	
•	Balachod Moti	47.1	36.4
CPCB Standa	ards dB(A)	50.0	40.0
Indus <mark>trial Are</mark>	ea la	2 R	
·	Project Site (Block- I)	68.5	42.0
·	Project Site (Block- II)	66.8	43.1
CPCB Standa	rds dB(A)	75.0	70.0
Period – 1 st N	1ay 2022 to 31 st May 2022)		0 ⁰⁰
Sr. No.	Monitoring Locations	Equivalent No	ise Level
	e-Payme	Leq _{Day}	Leq _{Night}
Residential A	rea		
•	Balachod Nani	51.4	40.8
•	Mothala	53.3	42.5
CPCB Standa	ards dB(A)	55.0	45.0
Commercial A	Area	I	1
Commercial A	Area		

•	Khanpar			63.1	52.4
•	Nr. Sumrasar Talav			57.5	41.7
•	Bhimpar			57.2	46.5
CPCB Standards	dB(A)			65.0	55.0
Silence Zone					
•	Balachod N	Ioti		48.3	37.1
CPCB Standards	dB(A)	6.11		50.0	40.0
Industrial Area		a Ly	/	T	
Project Site (Block- I)				64.2	41.4
ν V	Project Site	e (Block- II)		63.7	42.1
CPCB Standards	<mark>dB</mark> (A)		5	75.0	70.0
C. Water Envir 2019 to follows:	onment: Su 29 th Febru	Immary of Surface Wate Dary 2020 and for period	er Qu d fro	ality recorded for per om 1 st May, 2022 to	iod from 1 st December 31 st May, 2022 are as
Parameters	Unit	Baseline Monitoring Period (1 st Dec, 2019 – 29 th Feb, 2020) Range	Ad Bas (1 ^s Ma	ditional 1 Month seline Monitoring ^t May, 2022 – 31 st ny, 2022)	IS 2296:1992; Clas s C (Drinking water so urce after conventi onal treatment and dis- infection)
рН	-	6.57 – 7.73 6.		5 – 7.92	No relaxation (6.0 to 9.0)
EC	ø∕cm	m 716 – 1879.70 9.		5.25 – 2130.66	-
TDS	mg/l	442 – 1100 53		5 – 1246	1500
Total hardness	mg/l	123.22 – 197.96	182	2.46 – 266.21	-
DO	mg/l	6.0 - 6.3	5.2	2 - 5.9	4.0
BOD	mg/l	3.6 - 7.1	4.8	1 - 8.25	3.0
COD	mg/l	11.7 – 22.4	17.	35 - 42.51	-

Chloride	mg	<u>;</u> /1	63.59 - 148.61		73.13 – 170.90	600
Sulphate	mg	<u>z</u> /1	7.68 - 48.61		11.14 - 70.48	400
Nitrate	mg	<u>z</u> /1	4.83 - 19.23		6.57 – 15.27	50
Fluoride	mg	ç/l	0.28 - 0.73		0.35 – 0.91	1.5
Iron	mg	ŗ/I	0.01-0.28		0.05 - 0.21	0.5
Cadmium	mg	<u>y</u> /1	BDL (DL - 0.001)		BDL (DL - 0.001)	0.01
Arsenic	mg	<u>;</u> /1	BDL (DL - 0.01)		BDL (DL - 0.01)	0.2
Zinc	mg	ŗ/1	BDL (DL - 0.01)		BDL (DL - 0.01)	15
Lead	mg	<u>5/1</u>	BDL (DL - 0.001)		BDL (DL - 0.001)	0.1
Chromium	mg	<u>;/1</u>	BDL (DL - 0.03)	V	BDL (DL - 0.03)	0.05
Total Coliform		PN/1 ml	Present 76 – 240		5,000	
Parameters	Unit	Bas	eline Monitoring Pe riod Dec, 2019 – 29 th F (1 st May eb, 2020)		Additional 1 Month Baseline Monitoring st May, 2022 – 31 st May, 2022)	Permissible Limit
	9		Range	Range		
рН	com		7.11 - 7.88	fS	7.29 – 8.22	No relaxation (6.5 to 8.5)
EC	ø∕cm	50	<u> 1380 – 3300</u>	F	1371.04 - 3036.25	-
TDS	mg/l	~	<mark>76</mark> 0 – 1818	<mark>897</mark> – 1735		2000
Total hardne ss	mg/l		366.30 - 777.0		446.13 – 772.46	600
Chloride	mg/l		136.97 – 557.69		160.25 - 492.50	1000
Sulphate	mg/l		18.14 - 104.95		27.57 - 148.15	400
Nitrate	mg/l	B	DL (DL -2)– 18.33		3.65 - 21.48	No relaxation (45)
Fluoride	mg/l		0.31 – 1.66		0.36 – 1.91	1.5
Iron	mg/I	BD	L (DL - 0.01)– 0.03		0.14 - 0.31	No relaxation (1.0)

Parameters	Unit	Baseline Monitoring Pe riod (1 st Dec, 2019 – 29 th F eb, 2020)		Additional 1 Month Baseline Monitoring (1 st May, 2022 – 31 st May, 2022)		Permissible Limit	
		Ra	ange		Range		
Cadmium	mg/l	BDL (D	PL - 0.001)		BDL (DL - 0.	001)	No relaxation (0.00 3)
Arsenic	mg/l	BDL (I	DL - 0.01)		BDL (DL - 0.01)		No relaxation (0.0 1)
Zinc	mg/l	BDL (I	DL - 0.01)		0.11 - 0.13	8	15
Lead	mg/l	BDL (D	PL - 0.001)		BDL (DL - 0.	001)	No relaxation (0.0 1)
Chromium	mg/l	BDL (I	DL - 0.03)	N A	BDL (DL - 0	.03)	No relaxation (0.0 5)
		Q P!	hysico-Chemic	al	Characteristics		
Parameters		Unit	Baseline Period from 1 st Dec, 2019 to 29 th Feb, 2020		Additional Study Period From 1 st May, 2022 to 31 st M ay, 2022		
рН		- 142	6.	9-8.4		7.28 – 8.72	
EC	8	ø⁄cm	Profes	40 – 300 1		17	75.59 – 370.96
Infilteration	Rate	mm/hr	17.1	1 -	1 – 20.15		7.86 – 26.48
Bulk Dens	sity	g/cm3	1.52	1 -	- 1.788	1.474 – 1.725	
Water Holding city	g Capa	%	19.17 – 25.42		P ¹⁰ 2	29.14 – 38.64	
Organic Car	Organic Carbon % 0.25 – 0.68		- 0.68		0.28 - 0.76		
	Macro Nutrients						
Nitrogen Kg/h		Kg/hec	77.90 - 120.46		- 120.46	107.5 - 164.32	
Phosphor	Phosphorus Kg/hec 4.36		6-25.76		2	28.12 - 45.43	
Potassium Kg/hec		370.40 - 680.10		24	240.76 - 351.20		
			Micro N	Nu	trients		

Iron	mg/kg	1.300 - 1.320	1.454 - 2.508
Manganese	mg/kg	2.32-2.35	4.710 - 6.589
Zinc	mg/kg	0.18 - 0.19	0.147 – 0.216
Copper	mg/kg	Absent – 0.232	0.194 - 0.322
Nickel	mg/kg	Absent	Absent
Cadmium	mg/kg	Absent	Absent
Lead	mg/kg	5.05 – 5.11	1.112 – 2.329

xiii. Details of Public Hearing (PH): The Project Proponent has published the public notice for inviting comments upon present mining operations and their redressal as it is the case of revalidation of existing EC as follows:

Advertisement for PH with date Date of PH		Accordingly, an Advertisement/Public Notice was p ublished in English newspaper in "The Times of Indi a" on 03/03/2023 and in Gujarat in "Kutch Mitra" on		
Chaired by		en redressar on the above project.		
Main <mark>issues raised d</mark> urir	ng PH			
Budget proposed for ad sed during PH	dressing issues rai	C C C C C C C C C C C C C C C C C C C		
Additional information	(if any)	tects if She 15		
Court CaseThe Project I or land in wh	Proponent submitted ich the project is pr	d that there is no litigation pending against the project and/ roposed to be set up.		
R & R details	·e e-l	The Project Proponent reported that no private land within n the mine lease will be acquired for mining or any other project related activity and hence no rehabilitation and re settlement is involved under the present proposal.		
Affidavit as per Minis try's OM dated 30.05. 2018	Affidavit as per Minis rry's OM dated 30.05. 2018 The Project Proponent submitted the Affidavit dated 14.03.2019 stating that the company undertakes by affidavit that it will comply with all the statutor y requirement & judgment of Hon'ble Supreme Court dated 2nd August 20 17 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause v ersus Union of India & Ors before grant of ToR/EC.			
Undertaking of Projec t Proponent dated 16. 10.2023	Undertaking of Projec t Proponent dated 16.The Project Proponent submitted an undertaking to the effect that ToR issue d by Ministry vide letter dated 18.04.2022 for Mothala Balachod Bauxite mi ne of M/s Gujarat Mineral Development Corporation Ltd has been complied with and the data submitted is factually correct. The Project Proponent also			

	mentioned that they take the ownership of the content of this EIA report.
Undertaking of EIA Consultant dated 18.1 2.2023	The EIA Consultant submitted a declaration stating that no unethical practic e like 'copy and paste' and used external data/text without proper acknowle dgement, while preparing this EIA report. The consultant organization shall be fully accountable for any misleading information mentioned in this state ment.

xvii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Letter no. and date						
Consent to Esta blish/ Consent t o Operate	e-¥	ус	CAF				
Certified EC co mpliance report	 Certified EC Compliance of EC dated 08.12.2005 obtained from RO, MoEFCC, Gandhinagar on dated. 13th Nov. 2023. Site visit was conducted by RO on 0 9.05.2023. Project Proponent submitted the action taken report to the RO, Mo EFCC, Gandhinagar on 28.11.2023. The action plan for green belt development along with budgetary expenditure an d timeline was submitted to the IRO, MOEFCC – Gandhinagar in line with o bservation made in EC compliance. The closure report from IRO, MOEFCC – Gandhinagar received on 27.02 2024 						
oduction	Dept., Govt. of	Gujarat, District – Kutch	are given below:	eology and winning			
	Year	Plant grade & non plan grade production (mt.)	nt Dust & sub gra de (mt.)	Total (mt.)			
9	2006-07	0	0	0			
S /	2007-08	2323 Cots of She 17	0	2323			
1	2008-09	41933	5000	46933			
	2009-10	12846	1285	14131			
	2010-11	36928	5007	41935			
	2011-12	28184	2792	30976			
	2012-13	39096	3802	42898			
	2013-14	32047	3205	35252			
	2014-15	2075	264	2339			
	2015-16	0	0	0			
	2016-17	36422	3652	40074			
	2017-18	10045	200	10245			
	2018-19	28796	1269	30065			
	2019-20	19205.196	791.25	19996.45			
	2020-21	11896.804	456.20	12353.01			
	2021-22	23097.388		23097.388			
	2022-23	2080.268		2080.268			

xviii. ADS details:

The Proposal was earlier considered in 26th EAC (Non-Coal Mining) meeting held during 31st January & 1st February, 2024 wherein the Committee has considered and deferred the proposal and requested to submit the additional information. The PP has submitted the reply on 06.04.2024 are as follows:

Sl. N o.	ADS Point	Response by Project Pr	roponent
1.	The Project Proponent needs to justify that why amendment in EC not obtain ed for change in reduction of mine lea se area from 299.40 ha to 280.76.86 h	# Due to oversight it h ndment in this regard. been increased nor any beyond the area of leas	as been missed to seek ame However, lease neither has mining activity carried out se dead.
	а. е-КҮС	# approved Mine Plan same was share to EAC pplication as well as E- subsequent presentatio	is for 280.7686 only and the C (Non-Coal) during ToR A C Appraisal Application and ns.
	R I R I	# ToR Application sub n of existing EC, under ation 2006 in the year only and after detailed C (Non-Coal) was gran J-11015/150/2018-IA- 0.7686 ha only.	omitted for the Regularizatio r the purview of EIA Notific 2018, was for 280.7686 Ha discussion, Honourable EA nted the ToR vide F. No-IA- 11(M) 18 April 2022 for 28
	Name Protects	# Certified Compliance gional Office of MOEI ide Dated 26/03/2019 uring every site visit, a tted as 280.7686 ha on Therefore, looking to t (Non-Coal) is kindly re praisal Application for ing EC for an area 280	e Report (CCR) from the Re FCC has been issued twice v and dated 13/11/2023 and d rea of mine lease was submi ly. he above, Honourable EAC equested to consider EC Ap the Regularization of exist .7686 ha only.
2.	The Project Proponent needs to submit t the current practice of method of mining in line with the approved mining plan. Accordingly, the Project Propon ent needs to devise the site specific mitigation measures for environment attributes.	Mining method is subrest existing approved mining d of 2021-22 to 2025-22 The opencast method of with rock breaker and n. The Broad parameter be as below:	nitted hereunder in line with ing plan for the current perio 26. of mining shall be continued excavator-tipper combinatio ers of mining operation will
		days Working shift/day	1 day shift
		Working benches	3 no
		Bench Height	3.0m (max.)
		Width	For running bench 10m For ultimate bench 2.75m
			max.
		Bench slope	>55°
		Ommate Pit slope	43

Sl. N o.	ADS Point			Response by	y Project Prop	onent
				Drilling and as and wher ver since the Detail of Bl e plan has b The site spe ent attribute	l Blasting shal n hard strata w e year 2014, n asting Pattern een submitted ecific mitigations s are provided	I be practiced very rarely vill be encountered, howe o blasting has been done. , as per the approved min on measures of environm I in EIA report.
3.	The Project Propo ically define the a greenbelt, along re eralized area, no. o nder each area an and budget spent th supporting docu	Project Proponent needs to specify define the area developed under ibelt, along roads and in non-min ced area, no. of saplings planted u each area and their survival rate oudget spent towards the same wi pporting documents.			l plantation un ids and in non nted under each lget spent tow nents has been ke all necessa efficiently wit	nder greenbelt developme n-mineralized area, no. of ch area and their survival ards the same with suppo n submitted. Further, GM ry efforts to develop gree th good survival rate.
4.	The Project Proponent needs to submit the closure report w.r.t. greenbelt issued by the Regional Office, MoEF&C C.			Project prop r green belt enditure and dhinagar. The closure agar receive submitted.	oonent had sub development l timeline to th report from I ed on 27 th Feb	omitted the action plan fo along with budgetary exp he IRO, MOEFCC – Gan RO, MoEFCC – Gandhin oruary 2024 and has been
5.	The Project Propo t the more precise nitorable plan for under community with timeline.	The Project Proponent needs to submit the more precise, actionable and monitorable plan for activities proposed under community development along with timeline.			, actionable an proposed unde)24-25 has bee	ad monitorable plan for th er community developme en submitted.
6.	The Project Propo t the letter from the regarding the loca k, Wildlife Sanctu r/Elephant Reserv ithin 10 km radius	The Project Proponent needs to submi t the letter from the State Forest Dept. regarding the location of National Par k, Wildlife Sanctuary, ESZ/ESA, Tige r/Elephant Reserves, Corridors etc., w ithin 10 km radius of the study area.			rom the office CF), Kutch W – Bhuj receive IN/Te.11/530/ National Park er/Elephant Re radius of the P oject. Howeve SZ) of Kutch I a the project si	of Deputy Conservator o Vest Forest Dept. (State F ed on 05/03/2024 vide let /23-24. It is informed that , Wildlife Sanctuary, ES eserves, Corridors etc., w Mothala Balachod Bauxit er, the nearest Eco Sensiti Bustard Sanctuary is at 8. ite. The letter has been su
Sr. No.	Description	Existing Rec urring Cost P	Pr	oposed Cost (Rs. In Lacs)	Justification for Additi onal Cost
		er Annum (R s. In Lacs)		Capital	Recurring	
1	Air pollution Con trol	3.00		10.00	0.50	Additional installation of water sprinklers

Sr.	Description	Existing Rec	Proposed Cost (Rs. In Lacs)	Justification for Additi	
110.		er Annum (R s. In Lacs)	Capital	Recurring	ond Cost	
2	Water Pollution C ontrol	0.50	5.00	1.00	Garland drain, Retainin g wall & Siltation tank	
3	Environment Mo nitoring and Man agement	1.00	30.00 (conside ring online A AQMS)	10.00	Installation of weather station; Noise meter & 1 pair of RDS & FPS & its annual maintenan ce and regular Environ mental Monitoring	
4	Wired Fencing	1.50		<u> 4</u> r	NA	
5	Noise Pollution C ontrol	0.50	$I \checkmark E$			
6	Occupational Hea lth	1.00	2.00	0.70	Implementation of Cov id 19 as per the directiv e of Govt. of India for Employees	
7	Green Belt	4.00	6.00	4.00	Plantation	
8	Drinking Water	1.50	0.50	0.20	Additional water filtrat ion system.	
	Total	13.00	53.50	16.40		
	Grand Total	CP	53.50	29.40	Total Recurring cost re present existing and pr oposed	
9	Cost For CSR Activ CSR (Corporate Soc	vity: Project Prope cial Responsibiliti	onent will spend a es).	mount of 2%	of their gross income for	
Partic	Particulars			s)		
Capital Cost for Environment Protection			Capital Cost 5 Recurring Cos	Capital Cost 53.50 Lakhs Recurring Cost 29.40 Lakhs		
Budget for addressing the Public Hearing issues			The precise, ad ies proposed u 25 is of Rs. 18	The precise, actionable and monitorable plan for the activit ies proposed under community development in year 2024- 25 is of Rs. 1845000		
Total	Cost for EMP		Rs. 71.95 Lak based Socio-ed	Rs. 71.95 Lakhs (Capital cost of Env. Protection and Need based Socio-economic survey)		
Recur	ring Cost for EMP		29.40 lakhs	29.40 lakhs		

Project Cost	60 Lakhs
Employment	34 nos.

3.5.3. Deliberations by the committee in previous meetings



Deliberations of EAC 1 :

The Project Proponent/EIA Consultant informed the EAC that the instant proposal is for grant of Environmental Clearance under MoEF&CC Notification S.O.1530(E) dated 6th April 2018. Initially, the Environment Clearance obtained on 08.12.2005 for production capacity of 42,000 TPA of Bauxite over an area of 299.40 ha under the EIA Notification, 1994. The total mine lease area is 280.7686 ha and comprises of two blocks namely Block-1 and Block-2. The mine lease area is an arid land. The EAC noted that blocks are not contiguous. The EAC observed that after grant of EC dated 08.12.2005, the mine lease was revised and granted over an area of 280.76.86 ha. The EAC also observed that the Project Proponent did not obtained the amendment in EC for change in reduction of mine lease area from 299.40 ha to 280.76.86 ha. The EAC asked about the distance of the coastal area. The Project Proponent informed the EAC that the coastal area is more than 65 km from the mine lease area. The EAC on viewing the KML file noted that a pond is located in a higher elevated area. Then, the Project Proponent explained the point wise compliance of Terms of Reference.

The EAC asked the Project Proponent that why the production is very less. The Project Proponent informed the EAC that the production is very less because of the less demand. The Project Proponent informed the EAC that public consultation was carried out as per Ministry's OM dated 16.02.2021. An Advertisement/Public Notice was published in English newspaper in "The Times of India" on 03/03/2023 and in Gujarat in "Kutch Mitra" on 03/03/2023 for information of the stakeholders to invite comments about present mining operations and their redressal on the instant project. Then, the public consultation proceedings issued by the Gujarat Pollution Control Board (GPCB) vide letter dated 12.04.2023 stating that with the public notice published for a period of 30 days, no comments or representations were received either by written, oral, personnel or through any other media by this office within the stipulated period/time for the projects as mentioned in the advertisement. A budget of Rs 39.64 Lakhs has been earmarked w.r.t need based socio-economic survey. The EAC noted that the activities proposed under community development is very generic. The EAC opined that the proposed activities should be more precise, actionable and in monitorable manner. The Project Proponent informed the EAC that the Scientific study for installation of Continuous Ambient Air Quality Monitoring Station (CAAQMS) submitted to Central Pollution Control Board (CPCB) on 21.09.2023 and is under process. Ore breaking is done by rock breaker. The EAC noted that under mitigation measures for noise environment, the Project Proponent informed that Drilling is being carried out with sharp drill bits which helps in reducing noise. Further, the Project Proponent informed the EAC that from the year 2014, no blasting is carried out and only at exceptional case where hard strata found blasting activity is involved. The EAC asked the Project Proponent to submit the current practice of method of mining in line with the approved mining plan. Accordingly, the Project Proponent needs to devise the site specific mitigation measures for environment attributes.

The Project Proponent informed the EAC that as per EC dated 08.12.2005, it was directed to develop greenbelt of 10 ha around ML area, along roads and in non-mineralized area by planting suitable native species. The density should of trees should be around 1000 plants per ha. As on date, an area of 3.94 ha (4,310 no.s) developed around the ML area, roads, periphery of voids etc., The EAC was of the view that the Project Proponent needs to specifically define the area developed under greenbelt, along roads and in non-mineralized area, no. of saplings planted under each area and their survival rate and budget spent towards the same with supporting documents. The EAC noted that the Project Proponent has not submitted the closure report w.r.t. greenbelt issued by the Regional Office, MoEF&CC. The EAC also noted that the Project Proponent has not submitted the letter from the State Forest Dept. regarding the location of National Park, Wildlife Sanctuary, ESZ/ESA, etc., within 10 km radius of the study area. The EAC advised the information and data related to the project shall be readily available. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

1. The Project Proponent needs to justify that why amendment in EC not obtained for change in reduction of mine lease area from 299.40 ha to 280.76.86 ha.

2. The Project Proponent needs to submit the current practice of method of mining in line with the approved mining plan. Accordingly, the Project Proponent needs to devise the site specific mitigation measures for environment attributes.

3. The Project Proponent needs to specifically define the area developed under greenbelt, along roads and in nonmineralized area, no. of saplings planted under each area and their survival rate and budget spent towards the same with supporting documents.

4. The Project Proponent needs to submit the closure report w.r.t. greenbelt issued by the Regional Office, MoEF&CC.

5. The Project Proponent needs to submit the more precise, actionable and monitorable plan for activities proposed under community development along with timeline.

6. The Project Proponent needs to submit the letter from the State Forest Dept. regarding the location of National Park,
Wildlife Sanctuary, ESZ/ESA, Tiger/Elephant Reserves, Corridors etc., within 10 km radius of the study area.

3.5.4. Deliberations by the EAC in current meetings

The instant proposal is for Environmental Clearance under MoEF&CC Notification S.O.1530 (E) dated 6thApril 2018. The Project Proponent was granted Terms of Reference (ToR) on 18.04.2022. The PP presented the reply of the ADS points that were raised vide minutes of the 26th EAC meeting held during 31st January 2024- 1st February 2024 and stated that earlier LoI was issued for mineral bauxite over an area of 299.4005 vide EC dated 08.12.2005. However, as per corrigendum vide letter dated 02.02.2007 issued by Industries & Mines Department, Govt of Gujarat, the mining lease area was amended from 299.40 to 280.7686 ha at the time of lease deed. The EAC also enquired about the current practice of mining, the PP replied that they are undertaking opencast method of mining with rock breaker and excavator-tipper combination. PP also informed that drilling and blasting shall be practiced very rarely as and when hard strata will be encountered, PP further mentioned that they have not undertaken any blasting since the year 2014. With regard to the ADS point on plantation, PP submitted the detailed plantation under greenbelt development along roads and in non-mineralized area. PP committed that they will make all necessary efforts to develop green belt more efficiently with good survival rate.

The EAC noted the plantation report submitted by PP and asked the reason for the poor survival of the plants. PP informed that poor survival rate has been observed due to harsh climatic conditions, erratic rainfall, poor soil quality and poor land topography. PP mentioned that as on dated total 4530 No of plants have survived covering an area of 4.34 ha. Species planted includes Melai Azadiracta, Prosopis cineraria, Acacia Senegal, Magnifera indica, Guava etc. The EAC asked the PP to engage institute of national repute having expertise in plantation in arid climate to enhance the survival of the planted species. With regard to presence of Bustard, PP informed that as per DCF letter dated 5.03.2024, there are no national park, wildlife sanctuary, ESA/ESA present within 10 km radius of the Mothala Balachod Bauxite Mine. However, the nearest ESZ of Kutch Bustard Sanctuary is at a distance of 8.5 kms from the project site. The EAC advised the Project Proponent to adopt and implement protection and mitigation measures for conservation of Great Indian Bustard. The EAC also asked the PP to increase the plantation of short grasses which are suitable for the hard ground available near to the Project area and simultaneously local species needs to be increased within/outside the ML area. The EAC also noted that PP has submitted the closure report dated 27.02.2024 from Regional Office of the Ministry located in Gandhinagar.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its 29th EAC (Non-Coal Mining) meeting held during 9-10th May, 2024 **recommended** the proposal under MoEF&CC Notification vide S.O. 1530(E) dated 6th April 2018 and as per the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance for Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Environment Conditions

3.5.6.1. Specific

continuous ambient air quality monitoring stations

1. The Project Proponent should install the Continuous Ambient Air Quality Monitoring Stations in such numbers as per the scientific study and in consultation with CPCB.

real time data

The real time data generated by continuous ambient air quality monitoring stations (CAAQMS)
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.

transportation of mineral

The Project Proponent should implement the budget of Rs 53.5 Lakhs as Capital cost and Rs. 29.40
 Lakhs as recurring cost towards Environment Management Plan (EMP) within 3 years. The Project Proponent needs to submit the six-monthly report upon the progressive status of transportation of mineral through Rail and Road.

movement of wildlife

1. The Project Proponent shall strictly adhere to the action plan to monitor the movement of wildlife in the vicinity of the mine lease area.

camera tra<mark>ps</mark>

1. 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.

annual compliance

1. The Project Proponent needs to submit the annual compliance of the effectiveness of the Wildlife Conservation Plan from the Forest Department and submit it to the Regional Office of the Ministry.

monitoring on surface water

1. Regular monitoring on surface water flow, turbidity & water quality shall be carried out and report shall be submitted quarterly to the Ministry's Integrated Regional Office.

monitor the air quality

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.

avments

garland drains

1. Garland drains and catch drains shall be regularly desilted and maintained periodically at regular intervals.

peri	iodically monitor
1.	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 occupational health shall be carried out 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.

water sprinklers

The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area.

electric vehicles/cng/solar

1. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

third party audit

1. 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.

gap planta<mark>tion</mark>

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 Regional Office. Project proponent shall use saplings of 10 ft height for plantation. PP shall make provision for drip irrigation to conserve the water.

ro drinki<mark>ng wate</mark>r

1. 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.

rainwater harvesting structure

1. The Project Proponent shall provide the rainwater harvesting structure at mine office and quarters to recharge the ground water.

monitor and maintain the health records

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

1. 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.

2. 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.

cgw	a/sgwa
1.	Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable.
clea	rances/permissions
1.	Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
prot	tection and management
1.	The Project Proponent shall ensure that the protection and management of the water bodies should include provision of utilizing available water to the villagers by installing solar pumps as well as project proponent shall explore the possibility for installing floating solar panels for generation of electricity and distribution of power supply to the villagers.
mon	nitoring station
1.	The Project Proponent shall install the adequate number of monitoring station to undertake air quality and water quality monitoring in the vicinity of 5 km of the mine and water bodies and the six monthly data should be submitted to the Ministry.
envi	ironment laboratory
1.	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.
wate	er treatment
1.	The Project Proponent needs established water treatment facility for the drinking purposes within the ML area and submission of six-monthly report including the relevant photographs.
grou	und water
1.	The Project Proponent needs to conduct the study w.r.t. the impact of mining upon Ground water for identifying status of PH and other parameters of ground water and submit a report to the RO, MoEF&CC within six-month.
emp	oloyment-based apprenticeship
1.	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.
clea	n energy

The Project Proponent should explore the possibility for shifting to clean energy using electric
 equipment for cleaner production options to reduce the emission generated from various machineries.

mitigation measures

1. All the mitigation measures committed / envisaged in the EIA/EMP report and subsequent submission shall be implemented.

single use plastic (sup)

The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report

regrassing the mining area

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 Regional Office.

3.6. Agenda Item No 6:

1.

3.6.1. Details of the proposal

Proposed Hanamaneri Limestone Mine Block (Area: 445.37 Ha) with Limestone Production Capacity: 4.0 Millio n TPA, Intercalated Waste: 1.0 Million TPA, Top Soil: 0.19 Million TPA, Over Burden: 0.94 Million TPA (Total Excavation: 6.13 Million TPA) along with installation of Crusher & Screening Capacity:1300 TPH and OLBC C apacity : 1200 TPH with 14 km length at Villages: Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluk a: Badami & Mudhol, District: Bagalkot, State: Karnataka by J K CEMENT LIMITED located at BAGALKOT E,KARNATAKA

Proposal For Proposal No File No		Fresh EC			
Proposal No	File No	Submission Date	Activity (Schedule Item)		
IA/KA/MIN/453560/2023	IA-J-11015/39/2022-IA-II(NCM)	26/03/2024	Mining of minerals (1(a))		

3.6.2. Project Salient Features

The Proposal for Environmental Clearance for Hanamaneri Limestone Mine Block with total excavation of 6.13 MTPA (4.0 MTPA of Limestone, 1.0 MTPA of Intercalated Waste, 0.19 MTPA of Top Soil, 0.94 MTPA of Over Burden) along with installation of Crusher with screening capacity of 1300 TPH and OLBC Capacity of 1200 TPH of 14 km length in the ML area of 445.37 ha by M/s J K Cement Limited located at Villages Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluka Badami & Mudhol, District Bagalkot, Karnataka.

2.5.2 The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meetingare given as under: -

i. The instant project activity is listed at schedule no. 1(a) Mining of Minerals, the project falls under Category

"A" i.e. ML area greater than 250ha as per EIA Notification dated 14th September, 2006 as amended from time to time.

- ii. The mine lease area is located between Latitude 16° 08' 21.96"N to 16° 09' 57.63" N and Longitude 75° 23' 35.31" E to 75° 26' 02.58" E. The mine lease area falls under the Survey of India Toposheet No. for Core zone E43V7 and Buffer zone E43V7, E43V8 & E43V12 and falls in Seismic Zone-II as per IS:1893 (Part I): 2002.
- iii. Details of Terms of Reference (ToR): The Project Proponent has obtained ToR on 23.12.2022 for Hanamaneri Limestone Mine Block (Area: 445.37 Ha) with Proposed Limestone Production Capacity: 4.0 MTPA, Intercalated Waste: 1.0 MTPA, Top Soil: 0.19 MTPA, Over Burden: 0.94 MTPA (Total Excavation: 6.13 MTPA) in the ML area of 445.37 ha by M/s JK Cement Limited along with installation of Crusher & Screening 1300 TPH and OLBC 1200 TPH with 14 km length located at Villages Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluka Badami & Mudhol, District Bagalkot, State Karnataka.
- iv. Details of Mine Lease:

S. N o.	Prospecting License/ Let ter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the g rant	Name of th e Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine l ease ar ea in H a		
1.	Letter of Intent for grant of mining lease vide lett er No. DMG-17012/20/2 021/2021-22/9171 in pu rsuant to Rule 10 (2) of t he Mineral (Auction) Ru les, 2015	31.12.2021	Limestone	Letter of Intent is valid for a period of 3 year s from th e date of its issuan ce	Govt. of Ka rnataka	430 ha		
2.	Corrigendum to LoI vid e letter no. 17012/20/20 21/2021-22/9321 w.r.t t he extent of the Hanama neri Block was mentione d as 430 ha and it stands corrected as 445.37 ha	05.01.2022	Limestone	Letter of Intent is valid for a period of 3 year s from th e date of its issuan ce	Govt. of Ka rnataka	445.37 ha		
Priva	ate land	e-Pay	ments	419.83				
Gove	ernment land		25.54					
Fore	st Land		_					
Tota	Total Mining lease area (MLA), Ha		445.37					
Private land for crusher, workshop & other infrastructure outside the M LA		Mo infras M LBC of C to Plant	structure is prop Capacity 1200 T	osed outside PH with 14 k	the ML area exo	cept an O the Mine		
Mini	ng Plan includin Letter N	0.						

g Progressive Mine	Date	21.06.2022		
ed by Indian Bureau of Mines/DMG)	Mineral & (Major/Minor)	Major		
	Mine Lease Area, Ha	445.37		
	Validity	5 years		
Mining Parameters	Quantitative Description			
Method of Mining	Opencast Mechanized Limestone Mine			
Drilling/Blasting	Drilling & Blasting Parameters			
	S. No. Particular	Details		
	Dia of Hole	115 mm		
	Burden	3.5 M		
	Spacing	4 M		
	Depth of the Hol	le 6 to 8.5 Mts		
	Yield/Mtr.	84 to 112 Mtr		
	6. Powder Factor	9.5 Tonne/Kg		
Geological Reserves	147.35 Million Tonnes			
Mineable Reserves	69.37 Million Tonnes	s s		
Breakup of Total Ex cavation (Topsoil/O B/SB/IB/Mineral Rej ects/ Waste, MTPA)	Ø Limestone: 4.0 Million TPA Ø Top Soil: 0.19 Million TPA Ø Intercalated waste: 1.0 Million TPA Ø Overburden: 0.94 Million TPA Total Excavation: 6.13 Million TPA	eries		
Life of mine	~21 years	:5%		
Mine Bench Height & Bench Width	Bench height: 8 m Bench Width: 25 to 30 m	Process		
No. of Mine Benches	07 C-Payments	e		
Plan period m bgl	533 m AMSL (36 m bgl)			
Ultimate Depth of M ining, m bgl	519 m AMSL (50m bgl)			
Ground Water Table, m bgl	Pre-Monsoon: 16.3-36.8m bgl (531.2 to 559.7m AMSL), Post-Monsoon: 15. 2 to 35.8 m bgl (532.2 to 560.8m AMSL)			
Details of ground wa ter intersection	Groundwater will be intersected in 5 th y on will be obtained from KGWA before	year of mining operation and permissi e intersection		
Individual bench slo	70 ^o			

ре						
Overall pit slope	45°					
Details of existing/ p roposed Crusher	Installation of Crusher & Screening Plant: 1300 TPH Capacity					
Mineral Beneficiatio n	Nil					
RoM output size	40 to 85 mm					
Transportation detail s including capacity of dumper/tipper, mo de of transport and di stance	Initially, crushed cated at 15.5km crushed limeston	Initially, crushed limestone will be transported to its existing cement plant lo cated at 15.5km distance by covered trucks/tippers via road & after 4 th year crushed limestone will be transported via 14 km length of OLBC.				
Generation of Topsoi l/OB & its Managem ent during plan perio d & conceptual perio d.	tion of Topsoi its Managem ing plan perio nceptual perio M) of top soil will be utilized for greenbelt/plantation & 0.204 Million Tu onnes (0.156 Million CuM) of top soil will be stored & later on same will be utilized for greenbelt/plantation.					
e.Comple	 Ø At conceptual will be generilevelling of bad, nallah & Over Burden/Inte Ø During the plut of which 3 I be Intercala by retreating Ø At Conceptual ste will be get the bund alor f haul roads. 	l stage, 2.16 Million Tonnes (1.66 Million CuM rated & same will be utilized for greenbelt/planta backfilling, formation of the bund along the safet strengthening of haul roads. <u>ercalated Waste:</u> an period 5.12 Million Tonnes of waste will be 8.47 Million Tonnes will be OB and 1.65 Million ated waste which will be temporarily dumped sy manner covering an area of 14.69 ha. Al Stage 19.75 Million Tonnes of overburden/int enerated & same will be used for backfilling & the ated waste will be used for backfilling & the strengthenergy and the safety some of road, nallah, HT line & strengthenergy and the safety some of	 of top soil ation and for ty zone of ro generated; on Tonnes wil ystematically ercalated wa formation of engthening o 			
Total water requiremen	t 150 KLD	Domestic	10 KLD			
		Dust Suppression/Greenbelt	105 KLD			
		Greenbelt/Plantation	25 KLD			
		Workshop	10 KLD			
Source	Water will be	e sourced from ground water or abstraction struc	cture			

Permission for withdraw al/ intersection along wit h details of grant and its validityT o d rs	The Project Proponent has obtained the permiss und water for 150 KLD from the Karnataka C e NOC No. KGWAN1302760125, dated 11.12 s from the Date of its issuance.	sion for withdrawal of Gr Fround Water Authority vi 2.2023 and valid for 2 yea
Particulars	Particular's Name	Directions
Nearest Village	Kadarakoppa	~1.5 km in South direct ion
Nearest Town	Bagalkot	~20 km in East directio n
Nearest State/National High way	SH - 44C	0.13 km in NNW directi on
	SH -20	~ 2.5 km in West directi on
7	SH-34	~3.0 km in WSW direct ion
Railway Station/Railway lin e	Bagalkot Railway Station	~28 km in NNE directio
Water Bodies	Z CONTRACTOR	
e G	Protects of She 15 Protect	~ 1.5 km in ENE directi
Top.	Lokapur Halla	2.5 km in NE direction
anco	Ghatprabha River	6.5 km in NW direction
	Kalaskoppa Lale	~ 8.0 km in ESE directi on
	Hire Halla	~8.5 km in ENE directi on
	Gondimada Halla	~9.5 km in ENE directi on
Forest	Reserved Forest: ØReserved Forest ØReserved Forest ØReserved Forest ØReserved Forest ØReserved Forest	 Ø~1.0 km in WSW dire ction Ø~1.75 km in NWN dir ection Ø~2.5 km in North dire ction

	Ø Res Ø Res Ø Res Ø Res Ø Res Ø Res Ø Res	erved Forest erved Forest erved Forest erved Forest erved Forest erved Forest erved Forest erved Forest erved Forest	 Ø~3.5 km in NNW dire ction Ø~3.5 km in West dire ction Ø~4.0 km in WSW dire ction Ø~4.0 km in East direct ion Ø~5.5 km in SE directi on Ø~6.0 km in SE directi on Ø~6.5 km in SE directi on Ø~6.5 km in ESE direct ion Ø~8.5 km in SE directi on Ø~9.0 km in ENE direct ion
8	RA	RIVES	 Ø~9.0 km in ENE direction Ø~9.5 km in SE direction Ø~9.5 km in SE direction
Forest Land / Protected Area / Environmental S ensitivity Zone	Yes/No	Details of Certificate/letter issued by nt mentioning the Lr no, date of grar	y the concerned Departme at and remarks
Forest Land within the mine lease area and (if yes) status of Forest Cle arance	No	The Project Proponent has stated that n the proposed project area as per the O, Karnataka vide letter no. PCCF/V ed 16.11.2023.	at no forest land involved i e letter issued by State DF WL/D/CR-01/2022-23, dat
National Park	No	C GREEN	5
Wildlife Sanctuary	lo No	PI	
Elephant/Tiger Reserve	No	e-Payments	
Eco-Sensitive Zone (ES Z) /Eco-Sensitive Area (ESA)	No		
Coastal Regulation Zon e (CRZ)	No	-	
Schedule-I species (No. s and name of schedule- I species with authentic ated letter)	Yes	09 Schedule I species viz. 04 Mamm (<i>Canis lupas</i>) Indian Wolf, (<i>Hystrix</i> (<i>Macaca radiata</i>) Bonnet macaque; <i>lii</i>) Russell's viper, (<i>Naja naja</i>) Spec <i>ngalensis</i>) Indian Monitor Lizard; a	nals (<i>Canis aureus</i>) Jackal, <i>indica</i>) Indian Porcupine, 03 Reptiles (<i>Daboia russe</i> ctacled cobra, (<i>Varanus be</i> and 02 Avifaunal (Milvus

Wildlife Conservation P lan	Yes	migrans) Bla Conservation e DFO Vide n dated 06.0 ecommended Bangalore fo Budget propo	ck kite, (<i>Pavo cr</i> Plan has been p letter no. B2/GFI 1.2024. Further, t l by the CCF, Be r further approva	<i>istatus</i>) Indian Peafowl. Wildlife repared and recommended by th L/JKCement/CR/2023-24/1948 o the Conservation plan has been r elgaum and forwarded to PCCF, 1 on 07.02.2024. tion Plan is Rs. 45 Lakh.	
Proposed area for green be t/plantation and no. of sap ngs proposed	el 131.18 li) ha			
Budget for green plant & lantation till the end of lif of mine.	p Rs. 65:	5.90 Lakh	¢,	9,5	
Budget for nursery	The co in its F 5.5 km gs prop ries.	The company is already having well established 02 no (s). of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 1 5.5 km distance from the Proposed Limestone Mine Block. The saplin gs proposed for Greenbelt/ plantation will be sourced from these nurse ries.			
Details of existing planta on and its survival rate	ti Not Ap	Not Applicable as this is a proposed project			
No. of tree cuts in the min lease area and compensate y afforestation	e Approx or 1. The co ompen	Approx. 70 no. of trees will be cut due to the Proposed mining proposa l. The company is proposing to plant 140 additional no. of saplings as C ompensatory plantation.			
Particulars for Green belt/ lantation	p Area c	Area covered (in Ha)			
7.5 m barrier & Non mine alized areas	er 8.52 H	a C G	REEN	alessin'	
50 m safety zone of nallal roads, electric lines	h, At con carried	At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows: 1) Safety zone along ML boundary: 8.52 ha, 2) Safety zone along Canal, Nallah & HT line: 44.43 ha, 3) Plantation on Overburden: 20 ha, 4) Bench Plantation: 20.39 ha, 5) Plantation on Soil dump: 32.50 ha, 6) Plantation along Infrastructure: 5.34 ha			
Baseline Data (Air / Water	r / Noise / S	oil / Hydro geo	ological study/ Ti	raffic Study/ others)	
Period of baseline data col	lection			October to December 2022	
Season (Summer / Pre-mo	nsoon / Pos	st-monsoon / W	vinter)	Post Monsoon Season	

Predominant Wind direction (From)	Predominant Wind direction (From)		
Ambient Air Quality (no. of locations) and results			8
Noise level (no. of locations) and results			8
Water Quality (no. of locations) and results			8
Soil Quality (no. of locations) and results			8
Hydro geological study and results			Done
Traffic study (no. of locations) and results			Done
Advertisement for PH with date (name of ma jor national daily and one regional vernacular daily newspaper)	Advertisement for PH with date (name of ma jor national daily and one regional vernacular daily newspaper) "Deccan Herald" & ocal language on 17 "Sanje Darshan" & ada Newspaper resp 2023		
Date of PH	04.	10.2023 at 11:00	АМ
Venue	Project Site, Sy. No. 68/2, Lokapur, Lokapur-Bagalk ot Road (SH-44), Near Viraktamath Petroleums, Mu dhol-Taluk, Bagalkot-District		
Chaired by	Smt. Janaki K.M., I.A.S. Deputy Commissioner and Chairman, Environmenta I Public Hearing Committee, Bagalkote, Karnataka		
Main issues raised during PH	Ed Co	ucation, Employn mmunity welfare	nent, Environment, Health care, and Development
Budget proposed for addressing issues raised during PH over 3 years	Ca	pital Cost: 186 La	khs

The Project Proponent has submitted the following action plan with item wise break up of Public Hearing budget as follows:

Particular	Proposed Physical Activities to be done	ayme	Unit of Measurement					Bud
		1 st Year		1 st Year 2 nd Year		3 rd Year		(Rs. In L
		Location / A rea	Bud get (Rs. In L akh)	Locatio n / Area	Bud get (Rs. In L akh)	Location / Are a	Budg et (Rs. In La kh)	akh)
Education & Spo rts Facilities	Providing infrastructure to Govt. Schoo ls like study tables (40), Benches (40), Chairs (80), White boards (22), Smart Class boards (9) & projectors (6) and c	Hanamaneri/ Lokapur	8	Jalikatti B.K./ Ja likatti K.D.	6	Kadarkoppa/ Venkatapur/ H ebbal	6	20

	omputers (26) in each Govt. School) wi							
	rl's toilets (06)							
	Construction of library for preparation Competitive Exam (04)	Hanamaneri/ Lokapur	4	Jalikatti B.K./ Ja likatti K.D.	4	Kadarkoppa/ Venkatapur/ H ebbal	2	10
	Distribution of Sports kit to children (6 0), vending machine of Sanitary napkin s (6)	Hanamaneri/ Lokapur	5	Jalikatti B.K.	5	Jalikatti K.D.	5	15
Health & Care F acilities	Organizing Medical Camp in nearby vil lages (24) (Medical, Eye, Dental etc.) Asha Health Worker support (124) Aw areness Programme for Pregnant & Ad olescent Women (07) One ambulance f acility at Lokapur (Rs. 25 Lakh)	Hanamaneri/ Lokapur	7	Jalikatti B.K./ Ja likatti K.D.	7	Arlikatti/ Kajadoni	7	21
Skill Development	Setting up of skill training centre (04)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Ja likatti K.D.	4	Kadarakoppa	3	12
	Supporting surrounding Villages wome n Empowerment through Self Help Gro ups (40)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Ja likatti K.D.	5	Kadarakoppa	5	15
	Training of farmers or farmers groups i n different agricultural methods (MOD ERN METHODS), Training to farmers to grow the Cash crops to enhance agri	Lokapur	5	Lokapu r	5	Lokapur	5	15
	cultural growth, Dairy farming/ Poultry farming/ Goatary (30)	tects of S	ne 15			20		
Community Wel fare	Infrastructure Development near plant s urrounding villages like CC Roads (17 000 SQ.ft), Community Halls (02), Con struction of Toilets in association with Govt. Schemes, Developing Sports gro unds etc.	Hanamaneri/ Lokapur	nts	Jalikatti B.K./ Ja likatti K.D.	10 - P 10	Kadarakoppa / Kajadoni	15	35
	02 Community Centre at Lokapur and J allikatti K.D.	Lokapur	14	Jallikatt i K.D.	-	-	-	14
	Support for Farmers by providing mode rn equipment (06)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Ja likatti K.D.	5	Varchagal/ Chitrabanukot	5	15
Environment	Construction of Water Check Dam / An ikat in nearby Villages for increased gr ound water level (01)	Hanamaneri/ Lokapur	2	Jalikatti B.K./ Ja likatti K.D.	2	Kadarakoppa	2	6

	Provide Wat arby village:	er Filter Plant facility in ne s as per the requirement (0 6)	Hanamaneri/ Lokapur	2	Jalikatti B.K./ Ja likatti K.D.	2	Kadarakoppa	2	6
	Free distribu at each villag ominent pub	tion of 10000 Plants (2500 ge), plantation of trees at pr lic places in nearby village s	Hanamaneri/ Lokapur	1	Jalikatti B.K./ Ja likatti K.D.	0.5	Chaudapur/ Venkatapur	0.5	2
Total				73		55.5		57.5	186
 a the Project Proponent has submitted that ML area 445.37 ha fails in 4 vinages hamely Ha namaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D. Out of the total mining area 445.37 ha, 419.83 ha is Private Land & 25.54 ha is Govt. Land. The Project Proponent informed that 306.682 ha has been proposed to purchase out of 41 9.83 ha (private land). Out of 306.682 ha, 289.952 ha mining area and 16.73 ha non-minin g area for future exploration. It was also submitted that 60.82 ha has been purchased (44.09 ha mining area and 16.73 h a non-mining area for future exploration). The Project Proponent has submitted that the Resettlement & Rehabilitation (R&R) cost o f remaining land Rs. 121.23 Crore. 									
 Court Case, No and it s present status The Project Proponent has stated that one litigation pending against the Har amaneri Limestone Mine Block in the High Court of Karnataka, Bengalurr, vide Writ Petition No. 22125 of 2023 (GM-RES) filed on 03.10.2023 betwee en Sri. Vittal Pandappa Harijan @ Madar & others and State of Karnataka & others. Chronology and Implication of the Case From the High Court's website, it is evident that the petition was filed on 3 10.2023 and listed on 4.10.2023. However, due to time constraints, the matter was rescheduled for 6.10.2023. On 6.10.2023, despite being listed for the second time with office compliar ce items (8 in total), the petitioner's advocate requested an additional week to address office objections. Regrettably, to date, no action has been taken to rectify these objections or to carry out the necessary amendments to the petition. ü Consequently, the matter has not been listed again till date before court ar parently on account of non-removal of objections. ü Looking into above, the company would like to reiterate that the company has not been served with a copy of the petition of 06.10.2023, to supply cop y of petition to respondent's counsel and as the company have not beer provided with a copy of the petition leading to filing of the petition or ar y implications thereof, the chronology of events after 06.10.2023 is not a vailable with us. 					Han aluru etwe ataka on 3. s, the plian al we s or t urt ap pany ertaki / cop been or an not a en aft suing				
the present petition.Undertaking by Proje ct Proponent w.r.t couThe project Proponent has submitted an undertaking vide letter dated 14. 2024 and stated that only one litigation is pending against the PP and apa					4.02. part f				

rt case	rom the pending litigation no other notices has been received by the Project Proponent under section 5 of the Environment Protection Act, 1986.					
Affidavit as per Ministry's OM dated 3 0.05.2018		ry's OM dated 3	The Project Proponent has submitted an affidavit vide no n-judicial stamp paper of Rs. 50 vide dated 07.11.2022 an d certificate no. IN-KA77150483416555U in accordance with the statutory requirement & judgement of Hon'ble S upreme Court dated 2 nd August 2017 in writ Petition (civi l) No. 114 of 2014 in the matter of common cause versus Union of India & Ores.			
Undertaking by Project Proponent in EI A/EMP report		Proponent in EI	The Project Proponent has submitted an undertaking vide letter dated 13.02.2024 in Final EIA/EMP Report.			
Undertaking by Consultant in EIA/EMP The Consultant n undertaking v		The Consultant (J.M. Environet Pvt. Lton undertaking vide letter dated 12.02.20	d) has sut 24.	omitted a		
Plagiarism Certificate The Project Proponent has submitted a Plagiarism Certificate ate dated 12.02.2024 in Final EIA/EMP Report.				n Certific		
S. No.	Activities		Capi tal C ost	Recur ring Cost		
	A. Mitigative Measures		SS			
1.	Permanent	water sprinkling arrangements for main haulage road		100	5.0	
2.	7 nos. of Bag-filter for crusher system (OLBC transfer points-6 +1 crushe r)		175	4.0		
3.	Installation of Crusher		130	3.0		
4.	Acoustic enclosure for OLBC		200	2.0		
5.	Spill control guarding for OLBC		120	2.0		
6.	Canopy along Dry-fog system of 5 transfer points		100	1.0		
7.	10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area		30.0	2.0		
8.	Greenbelt/Plantation on 131.18 ha area with 3,27,950 nos of saplings @ 2500)		
	A. Green belt around 7.5 m periphery covering an area of 8.52 ha within i nitial 2 years (No. of saplings: 21300) (Considering Rs. 42.60 Lakh)		42.60	1.0		
	B. Plantation along the safety barrier of canal 30.72 ha within initial 5 ye153ars (No. of saplings: 76,800) (Considering Rs. 153.60 Lakh)0			153.6 0	0.30	

	C. Plantation along the nallah 10.27 ha, within initial 5 years (Nos of sapl ings 25,675) (Considering Rs. 51.35 Lakh)	51.35	0.30		
	D. Plantation along the HT line 3.44 ha, within initial 5 years (Nos of sap lings 8600) (Considering Rs. 17.20 Lakh)	17.20	0.30		
	 E. Plantation/Regrassing 20 ha on backfilled area (No. of saplings: 50,00 0) (Considering Rs. 100 Lakh) (11th to 20th year) 	_	10		
	F. Plantation on top soil stacking 32.50 ha on waste dump (No. of sapling s: 81,250) (Considering Rs. 162.50 Lakh) (16 th to 20 th year)				
	G. Plantation on top bench of water reservoir 20.39 ha on waste dump (N o. of saplings: 50,975) (Considering Rs. 101.95 Lakh) (16 th to 20 th ye ar)	101.9 5	0.30		
	H. Plantation on Mineral Storage: 1.20 ha, Statutory building: 0.20 ha, M ineral separation plant: 2.0 ha (No. of saplings: 13,350) (Considering Rs. 26.70 Lakh) (At the end of life of mine)	26.70	0.30		
9.	Modular STP	50	3.0		
10.	Washing Ramp with Oil-water Separator	32	0.20		
11.	Rain Water Harvesting Plan	60	5.0		
12.	Garland drain shall be made along the nallah (L*W*D = 16m x 1.2m x 0. 6m)	4.27	0.20		
13.	Construction of retaining walls within the mine area	6.34	0.20		
14.	Protection for Plantation (Fencing around area)	0 20	0.50		
15.	Construction of 02 nos Settling Tank	2.0	0.30		
16.	Construction of Protective Bunds (L*W = 1.0m x 1.1m)	22.49	0.20		
	Sub Total yments	1608	41.40		
B. Monitoring					
17.	03 nos. of Continuous Ambient Air Quality Monitoring Station at Mine S ite for the measurement of air quality for PM10, PM2.5, SO2, NO2 and C O and real time data connectivity with CPCB/SPCB Server	300	10		
18.	Fugitive dust emission monitoring (05 locations * monthly)	10.0	2.0		
19.	Installation of 01 nos of piezometer in ML area	6.0	0.30		
20.	Ground water quality analysis (Pre and Post-monsoon)	6.0	0.50		

21.	Surface Water Quality Analysis (Nallah & Canal: Pre & Post-mo	nsoon)	3.0	0.20
22.	Procurement of the Blast Vibration Measuring Instrument & Noise level meter			0.5
23.	Controlled blasting for minimizing ground vibration, fly rock, air pressur e/ noise, etc. by Using Nonel and Exel			7.0
24.	Ambient Noise Monitoring (05 locations * quarterly frequent	ncy)	4.0	0.4
25.	Work Place Noise Level Monitoring (05 locations * quarterly frequency)			0.2
26.	Providing Ear muffs/plugs to workers working in high noise area & PPEs			1.0
27.	7. Digital Mapping of entire mine area once in 5 years (Rs. 4.5 Lakh once in 5 years)			1.5
Sub Total			342	23.6
Total			1950	65
	Particulars	Budge	t (Rs. in C	Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of public hearing + Bud get Proposed for WLCP) Capital Cost of EMP + Capital cost of public hearing + Bud s/- Recurring nnum				.81 Crore 55 Lakh/ a
Project Cost Rs. 373 Cr			rores	
Employment 123 person				
		s	**	

3.6.3. Deliberations by the committee in previous meetings

N/A

3.6.4. Deliberations by the EAC in current meetings

EAC after deliberations noted that the instant proposal falls under green field project for mining of Limestone (auctioned block). The Project Proponent informed that there is no forest land involved in the mine lease area. The Committee noted that the project proponent has conducted the Public hearing after obtaining the Terms of Reference (ToR). Two Canals and a seasonal Nallah flowing through the ML area which should not be disturbed. On either side of the Canal and Nallah a 50 m safety distance has to be maintained. The crushed limestone will be transported to interlinked cement plant via road till 3rd year and from the 4th year via covered conveyor belt system. The Committee emphasised to submit the detail timeline in form of CPM/PERT chart and submit detailed work related to Civil, Electrical and Mechanical in form of percentage. The Committee emphasised that the PP should submit one final feasible route out of two proposed route for transportation of Limestone through conveyor belt system. Subsequently, The Committee noted that the Project Proponent has submitted the revised Socio-economic development plan to address the issues raised during the Public Hearing with a Budget expenditure of Rs. 408.2 Lakhs and Revised Wildlife Conservation Plan submitted to the Forest

Department with Budgetary provision of Rs. 110 Lakhs/-. The Committee asked the PP to submit the activity-wise detail of the Socio-economic development plan addressing the issues raised during the Public Hearing and also submit the activity-wise detail of Revised Wildlife Conservation Plan. Accordingly, the PP needs to submit the revised budget of EMP and total project cost (which should include the cost of conveyor belt system separately).

In view of the above, the Committee **deferred** the proposal for the submission of following requisite information:

i. The project proponent needs to submit the NOC from Indian Railways.

- ii. The Project Proponent shall submit the measures taken for strengthening of mine pit and protection of railway line which is running parallelly along the mine lease.
- iii. As the drilling & blasting activity is proposed and the railway line is passing parallelly the lease boundary, Project Proponent should carry out the scientific study from CIMFR or any other recognized institution of repute which is approved for carrying out such studies. The study should be clearly demonstrated that whether there are any adverse impacts and it can be controlled by adopting mitigative measures or not?
- iv. The Project Proponent should revisit the data submitted on noise level monitoring. The average data should be taken for every 15 minutes interval in view of the sensitivity of the railway line passing parallelly the lease boundary
- v. The PP needs to submit the detail timeline in the form of CPM/PERT chart considering all parameters involved for implementation of mechanized system (conveyor belt) and submit detailed work related to Civil, Electrical and Mechanical in form of percentage.
- vi. The PP should submit one final feasible route out of two proposed route for transportation of Limestone through conveyor belt system.
- vii. The PP needs to submit the updated list of Schedule-I species as per the wildlife Protection amendment act, 2022 and accordingly submit the revised wildlife conservation plan.
- viii. The PP needs to submit the update outcomes of the pending court case.
- ix. The PP needs to submit the revised Public Hearing cost w.r.t. addressing the issues raised during the Public Hearing.
- x. The PP needs to submit the detail backfilling and reclamation plan.

3.6.5. Recommendation of EAC

Deferred for ADS

3.7. Agenda Item No 7:

3.7.1. Details of the proposal

Expansion of production capacity from 0.13 MTPA to 0.3 MTPA of Sukurangi Chromite Ore Mining Project [M L Area 382.709 Hal located at village (s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, Teshil - Sukinda, District-Jajpur, Odisha by MIs Odisha Mining Corporation Ltd. by ODISHA MINING CORP ORATION LIMITED located at JAJAPUR,ODISHA

Proposal For		Application for Corrigendum		
Proposal No File No		Submission Date	Activity (Schedule Item)	
IA/OR/MIN/468292/2024	J-11015/348/2015-IA.II(NC M)	03/04/2024	Mining of minerals (1(a))	

3.7.2. Project Salient Features

2.6.1 The proposal is for Corrigendum in EC dated 30.07.2020 of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha.

2.6.2 The details of the project as ascertained from the document submitted by the Project Proponent as given under: -

- i. The PP has obtained the EC vide letter dated 30.07.2020 for mining of chromite of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha.
- ii. The SPCB, Odisha has issued CTO vide letter dated 28.03.2024 for Production capacity of 0.3 MTPA for Chromite ore.
- iii. The PP vide letter dated 03.04.2024 requested MoEF&CC for Corrigendum in EC accorded by MoEF&CC vide dated 30.07.2020 to resolve the following issues:
 - a. Specific Condition No.14 on Page No. 10 of 23 needs to be deleted, as the specified locations mentioned in the said Condition (Kannnappakunta and Kamalapuram) is in the State of Andhra Pradesh and not within Odisha. Also, the similar specific condition pertaining to the site-specific location already exists as Specific Condition No. 5.
 - b. Specific Condition No.15 on Page No. 10 of 23 needs to be deleted as this condition is not in line with the project specific EMP propositions and is over and above the specific condition no.6 (which had been recommended by EAC during the 17th EAC Meeting).
 - c. Specific Condition No. 17 on Page No. 11 of 23 needs to be deleted, as this condition is not in line with the project specific EMP propositions and is over and above the specific condition no.7 (which had been recommended by EAC during the 17th EAC Meeting).

3.7.3. Deliberations by the committee in previous meetings

N/A

3.7.4. Deliberations by the EAC in current meetings

The EAC after deliberations noted that the instant proposal is for Corrigendum due to typographically error in EC issued by MoEF&CC vide dated 30.07.2020 wherein the existing specific EC condition no. 14, 15 and 17 to be replaced as per earlier EAC minutes dated 28-29 may & 1 June, 2020, which is given below:

Specific condition no. 14: Budget proposed for Corporate Environment Responsibility (CER) shall be ₹ 32.02 Lakhs, which includes a) ₹ 2.5 Lakhs for Employment to locals (₹ 0.5 Lakh from 2019-20 to 2023-24), b) ₹ 2.50 Lakhs for Skill development for local SHGs (₹ 0.5 Lakh from 2019-20 to 2023-24), c) ₹ 2.50 Lakhs for Computer training, Scholarships (₹ 0.5 Lakh from 2019- 20 to 2023-24), d) ₹ 4.50 Lakhs for Creation of employment opportunity (₹ 1.0 Lakh from 2019-20 to 2022-23 &₹ 0.5 Lakh for 2023-24), e) ₹ 5.0 Lakhs for Health care services Medical camps, ambulance (₹ 1.0 Lakh from 2019-20 to 2023-24), f) ₹ 2.50 Lakhs for Pollution Control (₹ 0.5 Lakh from 2019-20 to 2023-24), g) ₹ 2.50 Lakhs for Plantation (₹ 0.5 Lakh from 2019-20 to 2023-24), h) ₹ 2.50 Lakhs for Solar Street lighting, distribution of LED, bulbs to villagers (₹ 0.5 Lakh from 2019-20 to 2023- 24), i) ₹ 2.50 for Drinking Water & sanitation (₹ 0.5 Lakh from 2019-20 to 2023-24), and j) ₹ 5.02 for Peripheral development (₹ 1.0 Lakh from 2019-20 to 2022-23 &₹ 1.02 Lakh for 2023-24). The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructures/facilities developed, etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

Specific condition no. 15: Budget proposed under Environmental Management Plan (EMP) shall be

₹ 2130 Lakh (Capital) &₹ 190 Lakh (recurring/annum) which includes i) Rs 25.0 Lakh (Capital) & Rs 30.0 Lakh (recurring) for Surface drainage (garland drains, settling its, retaining wall etc.) & dust suppression system (timeline 1st year), ii) Rs 7.0 Lakh (recurring) for Environment Monitoring, iii) Rs 4 Lakh (Capital) (time line 1 year) & Rs 3 Lakh (recurring) for Occupational safety which includes Procurement of safety appliances, iv) Rs 4 Lakh (recurring) for Green Belt Development, v) Rs 1794 (Capital) for Net Present Value (NPV) Payment, vi) Rs 153.0 Lakh (Capital) for Compensatory Afforestation, vii) Rs 154.0 Lakh (capital) (timeline 10 years) Wildlife Conservation Plan, and viii) Rs 146.0 Lakh (Recurring cost) for Socio-economic welfare measures in nearby village which is likely to be revised every year. The amount (except occupational health) proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

Specific condition no. 17: Budget earmarked under Occupational Health plan is Rs 4.0 (Capital) & Rs 3 Lakh (Recurring) which includes Procurement of safety appliances. The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

In view of the above, the EAC **recommended** the proposal for Corrigendum in EC dated 30.07.2020 for mining of chromite with enhancement in the production of chromite from of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha as per the EIA Notification, 2006 and its subsequent amendments.

3.7.5. Recommendation of EAC

Recommended

4. Any Other Item(s)

N/A

e-Pavments

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Mr Pankaj Verma	Scientist E	pan******@nic.in	Present
2	Dr Dinesh Misra	IFS (Retired)	dmi****@gmail.com	Present
3	Sh Niranjan Kumar Vasu	Member (EAC)	vas****@gmail.com	Present
4	Dr Asha Rajvanshi	Member (EAC)	ash******@gmail.com	Present
5	Shri Avijit Gosh	Member (EAC)	avi******@gmail.com	Present

6	Shri Bandi Ramchandra Reddy	Member (EAC)	red*********@gmail.com	Present
7	Prof Pramod Kumar	Member (EAC)	nit******@yahoo.com	Absent
8	Prof Devesh Walia	Member (EAC)	dev*****@gmail.com	Present
9	Dr Suresh Tiwari	Member (EAC)	smb*****@gmail.com	Present
10	Dr K G Asha Manjari	Member (EAC)	kim*******@gmail.com	Present
11	Prof Dev Dutt Sharma	Member (EAC)	dds***@gmail.com	Absent
12	Shri Mohammad Niyazi	Member (EAC)	dir******@gmail.com	Present
13	Mr V K Soni Representative of IMD	Member (EAC)	vij******@imd.gov.in	Absent
14	Dr Y G Kale Representative of IBM	Member (EAC)	ygk***@ibm.gov.in	Present



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

SUMMARY RECORD OF 29th MEETING OF THE COMMITTEE OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 29th meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 9-10th May, 2024 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 28th EAC (Non-Coal Mining) meeting held during 14th March, 2024 & 15th March, 2024.

The minutes of the 28th Meeting of the EAC (Non-Coal) held during 14thMarch, 2024 &15th March, 2024 were placed before the members of the EAC and confirmed by the Chairman.

Day 1: 9th May, 2024 (Thursday)

1.1 Chettichavadi Jaghir Magnesite and Dunite Mine with total excavation of 1.4 MTPA(including Magnesite of 0.06 MTPA, Dunite of 0.12 MTPA and others such as waste, O.B, Inter Burden, Top Soil of 1.22 MTPA) in the mine lease area of 449.364 ha of M/s. Dalmia Bharat Sugar and Industries Limited located at Chettichavadi Village, Salem Taluk, Salem District, Tamil Nadu - [Online proposal no. IA/TN/MIN/241375/2018; File No. 23-227/2018-IA.III(V), Consultant –M/s Aadhi Boomi Mining & Enviro Tech (P) Ltd] – Environmental Clearance (Violation category under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) reg.

The instant proposal is for grant of Environmental Clearance (Violation category under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) for Chettichavadi Jaghir Magnesite and Dunite Mine with total excavation of 1.4 MTPA (including Magnesite of 0.06 MTPA, Dunite of 0.12 MTPA and others such as waste, O.B, Inter Burden, Top Soil of 1.22 MTPA) in the mine lease area of 449.364 ha of M/s. Dalmia Bharat Sugar and Industries Limited located at Chettichavadi Village, Salem Taluk, Salem District, Tamil Nadu.

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

- The mine lease area is located between Latitude: 11°43'09.71" N to 11°44'36.233" N and Longitude: 78°07'23.268" E to 78°09'13.068" E. The mine lease area falls under the Survey of India Toposheet No: 58 I/2 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. The Project Proponent obtained Terms of Reference (ToR) vide ToR Lr. No: 23-227/2018-IA.III(V) dated 05.02.2021 for mining of Magnesite and Dunite in Chettichavadi Jaghir Magnesite and Dunite Mine for Total Excavation of 1.4 MTPA (including 0.06 million tons of Magnesite, 0.12 million tons of Dunite, Waste, O.B, Inter Burden, Top Soil etc. in the mine lease area of 449.364 ha under Ministry's Notification dated S.O 804(E)dated 14.03.2017.
- The proposal was earlier considered in the 43rdEAC (Non-Coal Mining) meeting iv. held during 14 -16th December, 2021 wherein the EAC deferred the proposal. The Project Proponent submitted the information on 11.03.2022 on Parivesh. But the Project Proponent did not comply to the observation of EAC and in view of the above additional details sought by the Ministry on 27.04.2022, 22.08.2022, 12.09.2022, 04.10.2022 and 22.11.2022 to provide the valid mine lease document and thereafter the Project Proponent submitted the information on 21.12.2022 on Parivesh. The proposal was again reconsidered in the 9th EAC (Non-Coal Mining) meeting held during 17-18th January, 2023 wherein the EAC deferred the proposal for want of requisite information, further the PP submitted the required information on 01.09.2023 in Parivesh Portal. The proposal was reconsidered in the 20th EAC (Non Coal Mining) meeting held during 21-22nd September, 2023 wherein the Committee asked the Project Proponent to submit the proof of payment of Rs. 18.69 crore as per Dept. of Geology and Mining, Guindy letter dated 09.12.2022 for further consideration of the instant proposal before the EAC. PP submitted the requisite information vide its letter dated 19.02.2024 and the, EAC considered the proposal in the 28th EAC meeting held during 14-15th March, 2024 wherein the EAC deferred the proposal and requested that PP to submit the copy of the reply of the show cause notice that it submitted to the Department of Mines and Geology along with the present status report in the matter from DMG Tamil Nadu.
- PP submitted the requisite information on 03.04.2024 in Parivesh Portal. Based upon the information submitted by the PP, the EAC considered the proposal in 29th EAC meeting held during 9-10th May, 2024. The reply submitted by PP is given as under:

S.	Observation of EAC in its	Reply by Project Proponent		
No.	meeting held during 14-15 th			
	March, 2024			
1.	PP needs to submit copy of the	Hon'ble High Court of Madras vide order		
	reply to show cause notice that	15.02.2024 directed that demand memos shall		
	it submitted to the Department	be construed as show cause notice and		
	of Geology & Mining, Tamil	directed PP to file reply to the same. The PP		
	Nadu.	has submitted the following information:		
		Hon'ble High court Order dated 15.02.2024		
	e-Kie	has been submitted by the Project		
		Proponent.		
		• Demand Memo dated 18.06.2019 w.r.t.		
		demand of INR 11.44 Cr has been		
		submitted by the Project Proponent.		
		• Reply dated 11.03.2024 w.r.t. INR 11.44 Cr		
	S Q A	has been submitted.		
		• Demand Memo dated 08.07.2020 w.r.t.		
		demand of INR 7.44 Cr. has been		
		submitted by Project Proponent.		
2.	PP needs to submit the present	The Project Proponent has submitted their		
	status report in the matter from	replies before Collector (Dept. of Mining &		
	Department of Geology &	Geology) Salem and the matter is pending for		
	Mining, Lamil Nadu	adjudication.		
3.	PP needs to submit the	The Chronology of the existing court cases is		
	Chronology of the existing court	given here under.		
	cases along with replies filed by	CDEEN		
	it and the State Authorities.	CKE-		

ADS Point No. - 3: PP needs to submit the Chronology of the existing court cases along with replies filed by it and the State Authorities.

Reply by FF. The Chionology of the existing court cases - DBSI	Reply by PP:	The Chror	ology of the	e existing	court ca	ases - DBSII
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		U	
	Case Reference	Facts	Present Status
S.No.			
1.	As per Supreme Court order	The said demand was	W.A. 834/2020 and
	dated 2 nd August 2017 in W.P.	challenged by DBSIL	W.P. No. 32057
	(Civil) No. 114 of 2014, District	before honorable	have now been
	Collector raised Demand	Madras High Court in	allowed by way of
	memo dated 18.06.2019	W.P. 889/2020. The	remand and the
	directing Dalmia Bharat Sugar	said W.P. along with	demands of INR

	and Industries Ltd (DBSIL) to	batch of others writs	11.44 Crore and
	pay INR 11.44 Crores on the	was dismissed by	7.24 have been set
	quantity of Dunite mined	Hon'ble Madras High	aside by Madras
	without EC for the period from	Court vide order dated	High Court orders
	1 st April 2000 to 31 st March	12.06.2020.	dated 15.02.2024 in
	2018.		W.A. 671/2020 and
		The order dated	batch.
		12.06.2020 was	
		challenged by DBSIL	
		vide W.A. No. 834 of	
	KYC.	2020	
2.	District Collector also raised	This demand was	
	another demand memo in	challenged by W.P. No.	
	08.07.2019 directing DBSIL to	32057 of 2023 before	
	pay 7.24 Crores on the	Madras High Court.	
	quantity of Magnesite mined		
	without EC for the period from	Rain Pa	
	1 st April 2000 to 31 st March		
	2018.		
3.	The District Collector raised	The Project Proponent	Pending. The stay
	the demand memo in respect	has filled W.P. No. 2517	or <mark>de</mark> r is still in force.
	of surface compensation	of 2018 before Madras	Th <mark>e</mark> stay order has
	under Rule 72 of MCR for an	High Court. Later on,	been submitted by
	amount of Rs. 79,88,39,062	vide orders dated	the Project
	for the period from 20.08.1966	28.02.2022, the writ has	Proponent.
	till 31.10.2017	been tagged with W.A.	
		757/2020.	
	· · · · · · · · · · · · · · · · · · ·	GREE	S
		The W.A. also pertains	S
		to said demand U/R 72.	
		e^`.	
	e-Pa	The said demand is	
		stayed till date.	The Meduce Likely
4.	VV.P. 22888/2023-DBSIL Vs	Writ Petition filed before	ine Madras High
	Secretary, MOEF&UU.	Iviadras High Court	Court in its
			03.04.2024 IN W.P.
		not insist on pre-	ZZOOO/ZUZJ
		Payment of INK 11.44	
		Crore and INK 7.24	to consider EC
		Grore for grant of EC	application in

		(Compensation	accordance with
		demanded by State	law without insisting
		Geology and Mining	for payment
		Department for mining	towards alleged
		without EC in light of	liability that arise
		Supreme Court order in	out of the previous
		Common Cause	order.
		Judgement dated	
		02.08.2017 in W.P.	
	NC	(Civil) No. 114 of 2014).	
5.	Credible Action taken by	CC. No. 388/2023 has	The matter is
	TNPCBd. CC No. 388/2023	been filed in Salem	pending for
	ha <mark>s be</mark> en filed by TNPCBd in	Judicial Magistrate	adjudication.
	S <mark>alem Cou</mark> rt, TN.	Court No IV and the	
	R	matter is listed for	
		hearing on 02.04.2024.	

vi. SEIAA/SEAC has approved the DSR for the Mineral Dunite and details has been mentioned below:

Date of	Proposal No/	Consideration by	Details <mark>of</mark> EC	Date of
application	File No	SEAA/SEAC		accord
31 st Jan 2023/	-	597 th Meeting of	-	-
23 rd Feb 2023		SEIAA dated 27th Feb		
	2	2023		
9	File No. C.No.	361st SEAC meeting	-	
A C	6013/2023	dated 10 th March		
		2023	2	
3		379th SEAC meeting		
	S	dated 12 th May 2023	. S	
	20	380 th SEAC meeting	~0	
		dated 17 th May 2023	~X`	
	C: No	627 th SEIAA meeting	Approved the	6 th June
	6011/ 2013	dated 6 th June 2023	DSR for Dunite	2023

vii. Details of Mine Lease in chronological manner:

S.	Details of grant of Mine Lease	Period of Grant		Name of	Mine	
No	deed execution	From	То	the Mineral	lease	
					area i	in
					Ha	
1	G.O.Ms.No.903 dt.25.02.1966.	1966	1986	Magnesite	574.46	
					На	

2	G. O.Ms.No.801 dt.	1976	1986	Dunite	574.46
	26.06.1976.				Ha
3	G.O.Ms.No.74 dt.	1986	2006	Magnesite	531.98
	11.03.1997.			& Dunite	Ha
4	Application No: SL: GO:55200(1)	-	-	Magnesite	449.364
	11-07-2005.			& Dunite	Ha.
5	Letter from Dept of Geology and	-	31.03.2030	Magnesite	449.364
	Mining vide Lr.No.TN RC No:			& Dunite	Ha.
	1355/MM9/2006 dated				
	09.12.2022 for validity of lease (till				
	31.03.2030), as per Sec 8(A)(5) of		Ca.		
	MMDR(Amendment) Act-2015.				

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

Privat <mark>e land</mark>					
Government land	449.364 Ha, Unassessed Dry Waste Land				
	Belonging to Government.				
For <mark>est land</mark>					
To <mark>tal Mining lea</mark> se area (MLA), ha	449.364 Ha				
Private land for crusher, workshop	Nil				
& other infrastructure outside the					
MLA					

ix. Mining plan details:

Mining Plan including Progressive	Letter No.	TN/SLM/ MG& DU/ ROMP-			
Mine Closure Plan (approved by	Ener Carling 15	1646-MDS.			
India <mark>n Bureau of Min</mark> es/DMG)	Date	30.03.2021			
3	Mineral &	Major – Magnesite			
10/2 C	(Major/Minor)	Minor – Dunite			
2	Mine Lease Area	449.364 Ha.			
	Mining Plan	2021-2022 to 2025-2026.			
	Validity	C. N.			
Mining Parameters	Quantitative Description				
Method of Mining	Open Cast Semi N	Mechanized Mining			
Drilling/Blasting	Deep Hole Drilling	Drilling 100-104 mm Dia &			
	Small Dia 25 mm	Dia Holes.			
Geological Reserves	Magnesite11.015979 Million Tonnes,				
	Dunite 32.165161 Million Tonnes.				
Mineable Reserves	Magnesite11.015979 Million Tonnes,				
	Dunite 32.165161 Million Tonnes.				

Breakup of Total Excavation	Magnesite 61913 T/yr (0.06 MTPA)					
(Topsoil/OB/SB/IB/Mineral Rejects/	Dunite 141436 T/yr (0.14 MTPA)					
Waste, MTPA)	Waste 1211009 T/yr (1.2 MTPA)					
	Total ROM/Excavation: 1414358 T/yr (1.4					
	MTPA)					
Life of mine	100 Years					
Mine Bench Height & Bench Width	7.5 Mtr Height, 15- 20Mtr Width					
No. of Mine Benches	4-5 Average.					
Existing Depth, m bgl	20m					
Ultimate Depth of Mining, m bgl	320m RL above MSL					
Ground Water Table, m bgl	325m & 335mRLaboveMSL.					
Details of ground water intersection	Not applicable					
Individua <mark>l bench</mark> slope	60° from Horizontal.					
Overall pit slope	45°					
Detail <mark>s of existing</mark> / proposed	Nit					
Crus <mark>her</mark>	s slatter a					
Min <mark>eral Beneficiati</mark> on	Not in Mine lease area, but done in Factory.					
Ro <mark>M output size</mark>	14,00,000Tonnes.					
Transportation details including	ROM by Dumpers& Mineral by 10 Tonners.					
capacity of dumper/tipper, mode of						
transport and distance						
Generation of Topsoil/OB & its	No Top Soil Generation.					
Management during plan period &	OB is stored in spoil dumps for future use.					
conceptual period						
Generation of Mineral Rejects/	Mineral rejects are stacked separately and sold					
Waste & its Management during	as per market demand.					
plan period & conceptual period	A STATES					

x. Water requirement:

· ·				
Total water requirement	70 KLD	Fresh water 70 KLD		
		Treated water		
Source	BORE WELL	ants.		
Permission for withdrawal/	OT8/AG-2/33/2023/Renewal-NOC/SLM/2023 dated			
intersection along with	20.02.2023 valid upto 17-Nov-2025.			
details of grant and its				
validity				

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

Particulars	Particular's Name	Distance	&
		Directions	
Village	Chettichavadi	850m (E)	

Town	Salem			10 Km	
Highway	NH 7 -	Salem – Bengaluru.		5.0 km – SW.	
	SH 188	3 – Salem – Yercaud.		3.12km – SE MDR	
	Muthar	naickanpatti Road (Salem)		696.	
				6.0km	- SW.
Interstate	N/A			N/A	
Boundary					0)
Railway	Salem	Junction Railway Station		6 KM (5)
Station/Railway					
			1		
water Bodies	S.No	Water Body	Di	rection	Distance
	1	Kannankurichi Lake		SE	4.7
	2	KannankurichiPuthueri		SE	4.64
	3	Thathampatti lake		SE	7.97
	4	Mariamman temple tank		SE	8.75
57	5	Selathampattiyeri		SW	7.05
	6	Lake near Vellakalpatti		SW	1.12
~	7	Lake near NH 7		SW	2.9
	8	Lake near Indiranagar		SW	3.14
	9	Pallapatti Lake		S	6.50
	10 -	Arisipalayam lake		S	7.07
	11	Kumaragiri lake		S	8.5
9	12	Lake near Muthunaickenpatti		W	10
Con I	13	Lake near Anaigoundampatty Kottagoundampatty Road		w	7.7
1 1 P/2	14	Samuthiram Lake		W	4.40
	15	Lake near Pagalpatti		Ŵ	6.21
	16	Lake near RC.Chettipatti	1	NW	8.1
	17	Lake near Kottaimettupatti		NW	7.64
	18	Lake near Kamalapuram		NW	7.72
	19	Lake near Vattakkadu		Ν	4.40
Forest	Nagarr	nalai RF	Nagar	malai RF	

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

Forest Land/ Protected Area/	Yes/No	Detail	s of Certificate/le	etter issued by
Environmental Sensitivity Zone		the	concerned	Department
		mention and re	oning the Lr no, emarks	date of grant

Forest Land within the mine	NO	Th	e Project Propo	onent has submitted		
lease area and (if yes) status of		&	informed that	No national park,		
Forest Clearance		Sa	ncturies, Bio	osphere reserve,		
National Park	NO	Wildlife Corridors, Ramsar Site,				
Wildlife Sanctuary	NO	Tig	er/Elephant re	serves or protected		
Elephant/Tiger Reserve	NO	are	as within 10k	m of the ML area		
		vid	e letter submit	ted by Tamil Nadu		
		Fo	rest Departme	ent vide letter no.		
		C.1	NO. 2378/2	2021.D1 dated		
	C III	04.	.10.2021.			
Eco-Sensitive Zone(ESZ) /Eco-	NO					
Sensitive Area (ESA)						
Coastal Regulation Zone	NO					
(CRZ)	- IV	1				
Schedule-I species (Nos and	Yes	Re	vised letter from	m the Forest Range		
name of schedule-I species	a 3/11	Off	icer, TN Fores	st Department was		
with authenticated letter)	pla: court	obt	tained mentio	ning the type of		
		Sc	hedule I Specie	es in the study area		
		of	10 Km Radiu	is vide Letter No.		
		C.1	No.228/2021 da	ated 13 th Feb 2023.		
	1.00%	$T \ge$				
		As	per the list 18	nos. of Schedule-1		
2		Sp	. are reported:	7		
		Sn	Common	Zoological Name		
	Protocol	1.0	Name			
	rects it Sh	1		Poo Couruo		
	Page	1.	Gaur Junglo Cot	Eolis Chaus		
	CGRI	2.	Juligie Cat Mouse Deer			
		5.	Wouse Deer	Meminna		
		4	Spotted Deer			
		5	lackal	Canis Aureus		
	-~Paymer	6	Bonnet-	Macaca Radiada		
		0.	Monkey			
		7	Devandoris	Slender Loris		
		(`	Devengions	(Loris		
				Lvdekkerianus)		
		8.	Pandolin	Manis		
			5	crassicaudata		
	1	11	1			
		9.	Palmcivet	Paradoxurus		

		10.	Porcupine	Hyxtrix Indica
			Birds	
		11.	Common	Pavo Cristatus
			Peafowl	
		12.	Crested	Spilansis Cheela
			Serpent	
			Eagle	
		13.	Laggar	Falco
			Falcon	Biarmicusjugger
1 N	C	14	Harriers	Circus
e-N.			Circus	Aerunginosus
		15.	White	Neophron
			Scavanger	Percnopterus
	$\sim 1 \vee$	2	Vulture	
	K	16.	White Eyed	Butastur Teesa
	a sala	-	Buzzard	
S Q	BIG.	19	Reptiles	
2 3		17.	Python	Python Molurus.
		18.	Russel Viper	Vipera (Daboia)
	1603	1		russelli
Wildlife Conservation Plan	Yes	Wil	dlife Conserva	tion Plan along with
Z		the	budgetary	Provisions with
24		tim	eline for impler	nentation has been
6 3		pre	pared and sub	mitted to DFO, IN,
	Diects of SW	Forest Department, Salem vide		
		Let	ter SL:MIVI:	26150. PP has
	PC GRE	lett	er dated 09.03	.2023.

xiii. Green belt/plantation details:

Proposed area for green belt/plantation and	13.2 Ha/ 19800 saplings
no. of saplings proposed	rs.
Budget for green plant & plantation till the end	Rs.13,50,000/-
of life of mine.	
Budget for nursery	Rs.2,00,000 per Annum
Details of existing plantation and its survival	67674 with Survival rate of 60-70%
rate	as on February 2024.
No. of tree cuts in the mine lease area and	N.A.
compensatory afforestation	
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	15 Ha
50 m safety zone of nallah, roads, electric lines	1.5 Ha

Minutes of 29th EAC (NCM) during 9-10th May, 2024

500 m safety zones of nearest habitation	5 Ha
villages	

xiv. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)						
Period of	December 1 st , 2	December 1 st , 2020 to February 28 th 2021				
baseline data						
collection						
Season (Summer	Winter Season					
/ Pre-monsoon /						
Post-monsoon /						
Winter)	ALC N					
Predominant	From SW, S an	d SE	-4r			
Wind direction						
(From)						
Ambient Air	6 locations,					
Quality (no. of	PM10 – 39µg/n	n ³ to 60µg/m ³				
locations) and	PM2.5 –19µg/n	n ³ to 33 µg/m ³				
results	SOx – 4µg/m ³ t	o 13µg/m³				
	NOx – 8µg/m ³ t	o 19µg/m³	X 28			
No <mark>ise level (no.</mark>	5 locations					
of locations) and	40.8 to 46.2 dB	A for the day ti	me and			
results	34.1 to 41.8 dB	A for the Night	time			
Water Quality	6 locations					
(n <mark>o. of locations</mark>)	pH 7.43-9.48, T	oH 7.43-9.48, TDS334 mg/l to 906 mg/l, Total Hardness 190 mg/l				
and results	to 280 mg/l, Chlorides 22 mg/l to 58 mg/l, Heavy metals Fe - 0 To					
	0.12 mg/l	.12 mg/l				
Soil Quality (no.	6 locations					
of locations) and	pH – 7.46 to 8.6	64				
results	moisture – 5.46	noisture – 5.46% to 6.56%				
	bulk density – 1	ulk density – 1.21g/cc to 1.47mg/l				
24 C	organic matter – 0.31% to 0.76%					
	Water holding o	apacity – 47%	to 56%		<u></u>	
Hydro geological	The detailed Hy	dro geologica	I study is giver	n in Page No 1	30(i) to	
study and results	130(xxxviii) of F	inal EIA report	(Volume I)		<u> </u>	
I raffic study (no.	a. I raffic study	/ has been co	nducted at Sin	igle lane village	e hard	
of locations) and	road which	passes into the	lease area.			
results	b. Transportat	ion of raw ma	aterial, fuel &	finished produ	ct will	
	be done 80	% by road.				
	c. Existina P	CU is 68 PC	U/day on Sin	gle lane village	e hard	
	road and ex	isting level of s	service (LOS) is	S:		
	Road	V	С,, .	Existing	105	
		(Volume	(Capacity	V/C Ratio		
		In				
		PCU/day)	uay.)			

	Single lane	68	2500	0.0272	2.72
	village hard				
	road				
	d. PCU load	after propose	ed project wi	ll be 68 (Exi	sting)
	+45(Additio	nal) = 113 PC	U/hr and level	of service (LO	S) will
	be:				
	Road	V	C	Proposed	LOS
		(Volume	(Capacity	V/C Ratio	
		In	In PCU/		
	VC.	PCU/Day)	day)		
	Single lane	113	2500	0.0452	4.52
	village hard				
	road				
	*Note: Capacity	asperIRC73:	1980 Guideline	for Capacity for	or
	roads.				
Z	Conclusion: Th additional traffic	e level of se due to propos	ervice will be sed project.	4.52 after ind	cluding

xv. Public Hearing (PH) Details:

Advertisement for PH with date (name of	01.08.2021
m <mark>ajor national</mark> daily and one regional	
ve <mark>rnacular daily</mark> newspaper)	
Date of PH	03.09.2021
Ve <mark>nue</mark>	Dalmia Old Colony Canteen Building.
Diecter	Opp. Wiegh Bridge.Chettichavadi Village,
9	Salem West Taluk, Salem District, TAMIL
3. Spc -	NADU-636012.
Chaired by	Dist. Collector & District Environmental
120	Engineer, TNPCBD.
Main issues raised during PH	Employment for the local villages.
Budget proposed for addressing issues	Rs.39.14 Lakhs.
raised during PH over 3 years	ients

xvi. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Certified Production Details from	The Duly Authenticated Production Details from
the inception of the mine (in	1979-80 to 2018-19 as per the Certificate issued by
tabular form against the EC	Department of Geology and Mining Salem vide
capacity)	letter ROC.45/2018/Mines-A dated 11.12.2018 is
	submitted in Final EIA/EMP Report, Table format of

certified production against EC has been submitted
as per standard format.

xvii. Rehabilitation & Resettlement (R&R):

R & R details	The Project Proponent has informed that no R&R
	involved in the instant proposal.

xvii. Court case details:

Court Case, No	Detail of total 9 court cases are mentioned below:				
and its present	1. W.P.25518/2006 Madras HC				
status	2. Writ Petition No.29275 of 2016 Madras HC				
	3. Writ Petition (Civil) No. 114 of 2014 of Supreme Court				
	4. District Collector, Salem has also raised another demand vide				
	order dated 8 th July, 2020 directing project proponent to pay sum				
	of INR 7.24 Crore on the quantity of Magnesite mined without EC				
	for the period 1 st April, 2000 to 31 st August, 2018.				
	5. District Collector"s demand of surface compensation of				
	Rs.79,88,39,062from20.08.19 66 till 31.10.2017.				
\leq	6. Show cause vide Proceeding Letter No.				
	SLM0006/DEE/TNPCB/S LM/RL/2014, dated 03.06.2014 by				
	Famil Nadu State Pollution Control Board U/s 19 of Environment				
	Protection Act.				
	7. Show Cause vide Proceeding Letter No.				
	FEF/TNPBC/SLM/F/006/20 by Tamil Nadu State Pollution Control				
0	Board U/s 19 of Environment Protection Act dated 4th May, 2020.				
	8. Show cause Notice dated 5thFebruary, 2013 under Water Act.				
l Q	Show cause Notice dated 5 th February, 2013 under Air Act.				
2	9. Environmental Activist Mr.S.Sakthivel filed a petition before the				
	Hon"ble NGT (SZ) raising certain Environmental issues against 6				
	respondents.				
Undertaking by	Affidavit Sworn on 22.04.2023 in a non-judicial stamp of Rs 100				
Project Proponent	bearing No. CZ – 744433 dated 21.04.2023.				
w.r.t court case.	e-Payments				

A. The PP filed a separate W.P. 22888 of 2023 praying that Ministry should consider there EC proposal without insisting on pre-payment of INR 11.44 crore and INR 7.24 crore in light of Hon'ble Supreme Court order dated 02.08.2017 passed in WP(C) no 114 of 2014 (Common Cause vs. Union of India). Hon'ble Madras High Court passed an order dated 03.04.2024 directing-

"2. The petitioner's application for grant of Environmental Clearance shall be considered by the 1st respondent and the 1st respondent is directed to consider the

petitioner's application in accordance with law without insisting any payment towards the alleged liability that arise out of the previous order passed by the 3rd respondent demanding huge sum by way of damages for mining without Environmental Clearance on the basis of judgment of Hon'ble Supreme Court, subject to filing of an affidavit of undertaking from the petitioner that the petitioner would pay whatever amount that is finally determined by way of compensation for previous mining operation without Environmental Clearance. This interim order is without prejudice to the contentions of parties in the main writ petition.

(3) The 1st respondent (MoEF&CC) is directed to pass orders on or before 15.06.2024.

(4) It is needless to state that the petitioner Company is required to comply with all statutory norms and satisfy all regulations and other conditions. If there is any difficulty that may arises for the 1st respondent to consider the application of the petitioner with the available materials, a fair opportunity to the petitioner should be given in advance so that the petitioner will satisfy the requirements then and there. It is also open to the 1st respondent to approach this Court for any clarification if they require."

- B. As per the Ministry's OM dated 30.05.2018, it was mentioned that in order to comply with the directions given by the Hon'ble Supreme Court, it has been decided to include the following additional conditions in TORs/ECs to be issued for mining projects under the provisions of S.0. 804 (E) dated 14.03.2017 and subsequent amendments:
 - a. 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 2ndAugust 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 inter-alia include commitment of the PP not to repeat any such violation in future.
 - b. In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
 - c. 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 27th August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
 - d. 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 2ndAugust 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

xviii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated	Affidavit Sworn on 22.04.2023 in a non-judicial					
30.05.2018.	stamp of Rs 100 bearing No. CZ – 744433 dated					
	21.04.2023.					
Undertaking by Project Proponent	The Project Proponent has submitted an					
in EIA/EMP report	undertaking with regard to Ministry's OM dated					
	05.10.2021.					
Undertaking by Consultant in	Undertaking by the Environment consultant has					
EIA/EMP report	been submitted as per Ministry's OM dated					
	04.08.2009.					

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

		<u> </u>	. ,	
S.No.		Activities	Capital cost	Recurring cost
			(INR)	(Lakhs/annum)
1		Safety kits for 320 persons @ Rs 1000 per	Rs. 3,20,000	Rs.2,00,000
		head	S	
2		Water Sprinkling & Spraying	Rs.15,00,000	Rs.8,00,000
3		Afforestation for @ 75 per tree	Rs. 3,00,000	Rs.3,00,000
4		Noise & Vibration		Rs.2,50,000
5		Air Quality Monitoring and Water Testing	- 1	Rs.1,50,000
6		Drainage- Parapet -Retention Wall	Rs. 5,00,000	Rs.3,00,000
		Total	Rs. 26.2	Rs.20.0 Lakhs
		Z B	Lakhs	
S	No.	Description	Estimated cost	(Rs.in Lakhs)
1		Budgetary provisions to implement the	Rs. 39.14 Lakh	S
		commitment based on Public Hearing		
		Summary of cost allocated for Remediation p	olan, NRAP, CRA	NP
S	No.	Description	Estimated cost (Rs.in Lakhs)	
1		Remediation Plan	Rs.162.50/-	
2		Natural Resources Augmentation Plan	Rs.236.00/-	
3		Community Resources Augmentation Plan	Rs.208.44/-	
		Total C-Downers	Rs.606.94	

Detail Budgetary provisions for Natural Resource Augmentation Plan:

	Natural Resource Augmentation Plan (Cost in Rs.Lakhs)										
SI. No.	Component Remediation	Proposed Activity	Description	Locations	Unit Rate in Rs.	Total Qty.	Total Cost	Phasing years			
								Year- I	Year- II	Year- III	
1.	Natural Resource Augmentation Plan	Water Management & Ground Water Recharge	Development of Rain Water Harvesting and ground water recharge structure 5 Nos Each in nearby 5 villages	1. 2. 3. 4. 5.	Chettichavadi- 10 Nos Velakkalpatti -10 Nos Kondapanayakanpatti -10 Nos Senaigowandanur -10 Nos Karuppur-10 Nos	Rs.57000/one unit	50 nos.	Rs. 28.5	Rs. 9.5	Rs. 9.5	Rs. 9.5
----	---	---	--	----------------------------	---	------------------------------	-------------	---------------	--------------	--------------	--------------
			Restoration and Cleaning of water bodies like ponds, Nallahs, Streams, etc in and around the lease area	1. 2. 3.	Chettichavadi Village Velakkalpatti Village Kondapanayakanpatti Village.	Rs.13,00,000/each village	5 nos.	Rs. 65.00	Rs. 21.66	Rs. 21.66	Rs. 21.66
2.			Construction of Check Dams of size 4 Mtr Length X 2 Mtr Height X 1 Metre Width in nearby villages	1. 2. 3.	Chettichavadi Village Velakkalpatti Village Kondapanayakanpatti Village.	Rs.13,00,000/each village	5 nos.	Rs. 65.00	Rs. 21.66	Rs. 21.66	Rs. 21.66
3.	KYA	Energy Conservation by adapting Green Energy technology	Providing 40 W Solar Street Lighting (including panels, inverters, wiring, structure, connectors, junction boxes, etc.) in nearby villages @ Rs.77, 500 per unit.	1. 2. 3.	Chettichavadi Village – 20 Nos Outside area Around ML area – 30 Nos Sides of Public roads connecting ML Boundary gate till factory gate - 50 Nos	Rs.77,500/one unit	100 nos.	Rs. 77.5	Rs. 25.83	Rs. 25.83	Rs. 25.83
	9		Sub-Tota	d — /	A (2a+2b+2c)	Protection of the second		Rs. 236.00	Rs. 78.65	Rs. 78.65	Rs. 78.7

Detail Budgetary provisions for Community Resource Augmentation Plan:

		10%	Community Re	source Augmentation Plan	(Cost in Rs. Lal	khs)	Ś			
SI. No.	Component Remediation	Proposed Activity	Description	Locations	Unit Rate in Rs.	Total Qty.	Total Cost	Pha	asing ye	ears
		, cr	2			250		Year- I	Year- II	Year- III
1.	Community Resource Augmentation Plan	Development of infrastructure	Construction / expansion of following as per requirement from local village panchayats or municipality in nearby villages at Rs.50,00,000/- per village Public Toilets / Bath Rooms Overhead Water Storage Tanks	 Chettichavadi Village Velakkalpatti Village Kondapanaickanpatti Village Karuppur Town Panchayat 	Rs.50,00,000/- per village	4 Nos Villages	Rs. 132.00	Rs. 44.00	Rs. 44.00	Rs. 44.00

			Compound Wall around Buildings at nearby Government Schools. Bus stops Public Library Public Children park Primary Health centre								
2.	K V2	Supply of Equipment's	Provision of following in nearby government schools, Sports Materials @ Rs.1.5 Lacs Lump Sum cost 1 NosWater Purifiers @ Rs.0.5 each cost Computers with Network facility facilitating Smart Class @ Rs.3 Lacs Lump Sum cost	1.	Chettichavadi Village = 2 Schools Velakallpatti Village = 1 School	Rs.5,00,000/- per School	3 Nos.	Rs. 15.00	Rs. 5.00	Rs. 5.00	Rs. 5.00
3.	e	Improving socio- economic & Health conditions	Providing following medical equipment's to nearby Primary Health Centres. 5 Nos Patient Beds with height adjustment @Rs.0.25 Lac each unit 1 Nos ECG Machine @ Rs.0.5 Lacs Each unit 1 Nos Portable X-Ray Machine @ Rs.1.5 Lacs each unit 5 Nos Vital Monitors @ Rs.1.00 Lac Each 8 Nos SHYCOCAN (Viral Attenuation Device including CoVID 19) @ Rs.0.30 Lacs each	1. 2. 3. 4.	ChettichavadiVillage Velakkalpatti Village Kondapanaickanpatti Village Karuppur Town Panchayat	Rs.10,24,000/- per village	6 Nos	Rs. 61.	Rs. 18.35	Rs. 18.34	Rs. 18.34
			Sub-Total	- (C (3a+3b+3c)	-	-	Rs. 208.44	Rs. 69.48	Rs. 69.48	Rs. 69.48

Minutes of 29th EAC (NCM) during 9-10th May, 2024

ſ	Grand Total A +B +C (Rs.)	Rs.	Rs.	Rs.	Rs.
I		606.94	200.63	200.63	205.68
I					

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of	0.653 crore (0.262 +
Public hearing)	0.3914)
Project Cost	19.57 crore
Employment (Nos)	350 Persons.

3. Observation and Recommendation of the Committee:

The instant proposal is for Environmental Clearance under violation category considered in accordance with the Ministry's Notification dated S.O. 804(E) dated 14.03.2017. The Public Hearing for the instant project was conducted on 03.09.2021 after obtaining ToR (under violation category) for mining of Magnesite and Dunite in Chettichavadi Jaghir Magnesite and Dunite Mine.

PP appraised the EAC about the direction passed by the Hon'ble Madras High Court vide their order dated 03.04.2024 passed in W.P. 22888 of 2023. The order in verbatim is given as under:

"2. The petitioner's application for grant of Environmental Clearance shall be considered by the 1st respondent and the 1st respondent is directed to consider the petitioner's application in accordance with law without insisting any payment towards the alleged liability that arise out of the previous order passed by the 3rd respondent demanding huge sum by way of damages for mining without Environmental Clearance on the basis of judgment of Hon'ble Supreme Court, subject to filing of an affidavit of undertaking from the petitioner that the petitioner would pay whatever amount that is finally determined by way of compensation for previous mining operation without Environmental Clearance. This interim order is without prejudice to the contentions of parties in the main writ petition.

(3) The 1st respondent (MoEF&CC) is directed to pass orders on or before 15.06.2024.

(4) It is needless to state that the petitioner Company is required to comply with all statutory norms and satisfy all regulations and other conditions. If there is any difficulty that may arises for the 1st respondent to consider the application of the petitioner with the available materials, a fair opportunity to the petitioner should be given in advance so that the petitioner will satisfy the requirements then and there. It is also open to the 1st respondent to approach this Court for any clarification if they require."

The Project Proponent presented the reply of ADS points raised on 14.03.2024 before the EAC. The Project Proponent informed the Committee that they have filed their reply and the matter with regard to the construed show cause notice is pending before the District Collector and the Deputy Director, Department of Geology and Mining, Salem.

The EAC noted that the PP has submitted an affidavit dated 08.04.2024 on Rs 100 non judicial stamp (DR 283734) in compliance of the direction passed by the Hon'ble Madras High Court dated 03.04.2024 in W.P. 22888 of 2023. Vide aforesaid affidavit, PP has stated that they will pay whatever amount that would be finally determined by way of compensation for previous mining operation without Environmental Clearance.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Environmental Clearance (Violation category considered under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) for Chettichavadi Jaghir Magnesite and Dunite Mine with total excavation of 1.4 MTPA (including Magnesite of 0.06 MTPA, Dunite of 0.12 MTPA and others such as waste, O.B, Inter Burden, Top Soil of 1.22 MTPA) in the mine lease area of 449.364 ha of M/s. Dalmia Bharat Sugar and Industries Limited located at Chettichavadi Village, Salem Taluk, Salem District, Tamil Nadu under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions to be followed:

Specific conditions:

- i. The Environmental Clearance will be valid till the validity of Mine lease i.e. 31.03.2030.
- ii. 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.
- iii. 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.
- iv. EAC recommended for an amount of Rs.606.94 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:

	Budget allocated for Remediation plan, NRAP, CRAP										
S.No.	Description	Estimated cost (Rs.in Lakhs)									
1	Remediation Plan	Rs.162.50/-									

2	Natural Resources Augmentation Plan	Rs.236.00/-
3	Community Resources Augmentation Plan	Rs.208.44/-
	Total	Rs.606.94

Detail Budgetary provisions for Natural Resource Augmentation Plan:

	Natural Resource Augmentation Plan (Cost in Rs. Lakhs)										
SI. No.	Component Remediation	Proposed Activity	Description		Locations	Unit Rate in Rs.	Total Qty.	Total Cost	Pha	sing ye	ears
									Year- I	Year- II	Year- III
1.	Natural Resource Augmentation Plan	Water Management & Ground Water Recharge	Development of Rain Water Harvesting and ground water recharge structure 5 Nos Each in nearby 5 villages	1. 2. 3. 4. 5.	Chettichavadi- 10 Nos Velakkalpatti -10 Nos Kondapanayakanpatti -10 Nos Senaigowandanur -10 Nos Karuppur-10 Nos	Rs. 57000/one unit	50 nos.	Rs. 28.5	Rs. 9.5	Rs. 9.5	Rs. 9.5
	KY2		Restoration and Cleaning of water bodies like ponds, Nallahs, Streams, etc in and around the lease area	1. 2. 3.	Chettichavadi Village Velakkalpatti Village Kondapanayakanpatti Village.	Rs.13,00,000/each village	5 nos.	Rs. 65.00	Rs. 21.66	Rs. 21.66	Rs. 21.66
2.			Construction of Check Dams of size 4 Mtr Length X 2 Mtr Height X 1 Metre Width in nearby villages	1. 2. 3.	Chettichavadi Village Velakkalpatti Village Kondapanayakanpatti Village.	Rs <mark>.</mark> 13,00,000/each village	5 nos.	Rs. 65.00	Rs. 21.66	Rs. 21.66	Rs. 21.66
3.	ert	Energy Conservation by adapting Green Energy technology	Providing 40 W Solar Street Lighting (including panels, inverters, wiring, structure, connectors, junction boxes, etc.) in nearby villages @ Rs.77, 500 per unit.	1. 2. 3.	Chettichavadi Village – 20 Nos Outside area Around ML area – 30 Nos Sides of Public roads connecting ML Boundary gate till factory gate - 50 Nos	Rs.77,500/one unit	100 nos.	Rs. 77.5	Rs. 25.83	Rs. 25.83	Rs. 25.83
			Sub-Tota	I – .	A (2a+2b+2c)			Rs. 236.00	Rs. 78.65	Rs. 78.65	Rs. 78.7

Detail Budgetary provisions for Community Resource Augmentation Plan:

	Community Resource Augmentation Plan (Cost in Rs. Lakhs)									
SI. No.	Component Remediation	Proposed Activity	Description	Locations	Unit Rate in Rs.	Total Qtv.	Total Cost	Pha	asing ye	ears
								Year- I	Year- II	Year- III

1.	Community Resource Augmentation Plan	Development of infrastructure	Construction / expansion of following as per requirement from local village panchayats or municipality in nearby villages at Rs.50,00,000/- per village Public Toilets / Bath Rooms Overhead Water Storage Tanks Compound Wall around Buildings at nearby Government Schools. Bus stops Public Library Public Children park	1. 2. 3. 4.	Chettichavadi Village Velakkalpatti Village Kondapanaickanpatti Village Karuppur Town Panchayat	Rs.50,00,000/- per village	4 Nos Villages	Rs. 132.00	Rs. 44.00	Rs. 44.00	Rs. 44.00
2.	Kly e-Um	Supply of Equipment's	Primary Health centre Provision of following in nearby government schools, Sports Materials @ Rs.1.5 Lacs Lump Sum cost 1 NosWater Purifiers @ Rs.0.5 each cost Computers with Network facility facilitating Smart Class @ Rs.3 Lacs	1.	Chettichavadi Village = 2 Schools Velakallpatti Village = 1 School	Rs.5,00,000/- per School	3 Nos.	Rs. 15.00	Rs. 5.00	Rs. 5.00	Rs. 5.00
3.		Improving socio- economic & Health conditions	Lump Sum cost Providing following medical equipment's to nearby Primary Health Centres. 5 Nos Patient Beds with height adjustment @Rs.0.25 Lac each unit 1 Nos ECG Machine @ Rs.0.5 Lacs Each unit 1 Nos Portable X-Ray Machine	1. 2. 3. 4.	ChettichavadiVillage Velakkalpatti Village Kondapanaickanpatti Village Karuppur Town Panchayat	Rs.10,24,000/- per village	6 Nos	Rs. 61.	Rs. 18.35	Rs. 18.34	Rs. 18.34

 @ Rs.1.5 Lacs each unit 5 Nos Vital Monitors @ Rs.1.00 Lac Each 8 Nos SHYCOCAN (Viral Attenuation Device including CoVID 19) @ Rs.0.30 Lacs each 						
Sub-Total -	– C (3a+3b+3c)		Rs. 208.44	Rs. 69.48	Rs. 69.48	Rs. 69.48
Grand Total A	A +B +C (Rs.)	4	\$ Rs. 606.94	Rs. 200.63	Rs. 200.63	Rs. 205.68

- v. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs. 606.94/- Lakhs. Therefore, Project Proponent shall be required to submit a bank guarantee of an amount of Rs. 606.94/- Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
- vi. 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.
- vii. 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 Regional Office which should be monitorable and verifiable. The period of addressing these issues is restricted to a period of 3 years.
- viii. The Project Proponent shall continue to monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at lease boundary 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.
- ix. 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.
- x. 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.

- xi. 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 Regional Office in the six monthly compliance report.
- xii. 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.
- xiii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xiv. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed near the areas that are prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions.
- xv. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs. 0.262 Crores (capital cost) and Rs. 0.20 Crores (Recurring cost). 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 Regional Office. The details of EMP with budgetary provisions are mentioned below:

S <mark>.No</mark> .	Activities	Capital cost	Recurring cost
		(INR)	(Lakhs/annum)
	ž C	l a l	
1	Safety kits for 320 persons @ Rs 1000 per	Ba 2 20 000	Rs.2,00,000
	head	RS. 3,20,000	
2	Water Sprinkling & Spraying	Rs.15,00,000	Rs.8,00,000
3	Afforestation for @ 75 per tree	Rs. 3,00,000	Rs.3,00,000
4	Noise & Vibration		Rs.2,50,000
5	Air Quality Monitoring and Water Testing	T	Rs.1,50,000
6	Drainage- Parapet -Retention Wall	Rs. 5,00,000	Rs.3,00,000
	Total	Rs. 26.2	Rs. 20.0 Lakhs
	e-Payments	Lakhs	

- 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 noncompliance 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 Project Proponent shall ensure the survival rate of 95% for planting the peripheral, safety barrier plantation and gap plantation. 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. The Project Proponent shall implement the practice of drip irrigation for plantation. Plantation shall be undertaken in consultation with the State Forest Department. The entire peripheral plantation safety barrier plantation and gap plantation needs to be completed within 3 years from the start of mining operations. Project proponent shall use saplings of 10 ft height for plantation.
- xix. The budget of Rs. 0.3914 crore 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.
- xx. 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.
- xxi. The Project Proponent shall provide the rainwater harvesting structure at mine office and quarters to recharge the ground water.
- xxii. 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.
- 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 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.
- xxv. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable.
- xxvi. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.

- xxvii. The Project Proponent shall ensure that the protection and management of the water bodies should include provision of utilizing available water to the villagers by installing solar pumps as well as project proponent shall explore the possibility for installing floating solar panels for generation of electricity and distribution of power supply to the villagers.
- xxviii. Mist spray arrangement shall be made at all the transfer points. PP should also provide duct hoods at all dust generating points including transfer points along with Bag filter.
- xxix. The Project Proponent needs established water treatment facility for the drinking purposes within the ML area and submission of six-monthly report including the relevant photographs.
- xxx. The Project Proponent needs to conduct the study w.r.t. the impact of mining upon Ground water for identifying status of PH and other parameters of ground water and submit a report to the IRO, MoEF&CC within six-month.
- xxxi. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

1.2. Magnesite and Dunite mining with the Production Capacity of 26,43,936 MTPA ROM (which includes 115071 TPA Magnesite and 67104 TPA Dunite) in the ML area of 622.29 Haof M/s SAIL Refractory Company Limited located at Village Thathaiyanagarpatti, Moongilpadi, Karuppur, Vellakkapatti, Mallamoopanpatti Taluk Omalur & Salem, District Salem, Tamil Nadu – [Online Proposal No. IA/TN/MIN/465426/2024, File No. 23-166/2018-IA.III (V), EIA Consultant - VARDAN ENVIRONET] - Environmental Clearance (Violation category under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) reg.

The instant proposal is for grant of Environmental Clearance (Violation category under Ministry's Notification dated S.O. 804(E) dated 14.03.2017) for Magnesite and Dunite mining with the Production Capacity of 26,43,936 MTPA ROM (which includes 115071 TPA Magnesite and 67104 TPA Dunite) in the ML area of 622.29 Ha of M/s SAIL Refractory Company Limited located at Village Thathaiyanagarpatti, Moongilpadi, Karuppur, Vellakkapatti, Mallamoopanpatti Taluk Omalur & Salem, District Salem, Tamil Nadu.

2. The details of the project as ascertained from the document 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: 11⁰41'19.86645" N to 11⁰44'55.08940" N and Longitude: 78⁰05' 10.30542" E to 78⁰08'51.75760" E. The

mine lease area falls under the Survey of India Toposheet No: 58-I/02 and falls in Seismic Zone-III.

ii. Details of ToR:

Date of	Proposal No/ File No	Details of ToR	Date of
application			accord
31.01.2017	IA/TN/MIN/62144/2017	Terms of References (ToR)	17.09.2021
	F.No.23-166/2018-IA.	was issued vide F.No.23-	
	III(V)	166/2018-IA.III(V) dated	
		17.09.2021.	

iii. Details of Mine Lease:

S.No	Prospecting	Date of	Name of	Period	Granted	Mine
	Lic <mark>ense/</mark> Letter of	Grant	the Mineral	of Grant	by	lease
	Intent (Lol)/ Grant		& (Major/			area in
	of Mine lease and	2	Minor)			На
	Lr No			S		
1.	The Mining Lease	05.06.197	Magnesite	20	State	622.69
	was granted to M/s	9		Years	<mark>Go</mark> vt. of	
	Burn Standard				Tamil 🛛	3
	Company Ltd.				<mark>Na</mark> du	<u>`</u>
	(BSCL, A Govt. of					S
	India Undertaking)			0		
	Salem-636005,	2 13		12		
	Tamil Nadu for a	2		15		
	period of 20 years	70		0		
	vide G.O. No. 853	Poter	State 15	110		
	dated 05.06.1979,		511 500		× 20	
	over an extent of	SP2	SSEE		1.15	
	622.69 Ha and the		GREF		5	
	lease deed was				. ° ′ ′	
	executed on			8.		
	21.04.1 <mark>980 for a</mark>			6		
	period of 20 years	e-pa	/ments			
	and expires on					
	20.04.2000.					
2.	Supplementary	20.03.198	Magnesite		State	622.69
	Lease Deed was	9	&Dunite		Govt. of	
	executed on				Tamil	
	20.03.1989 for				Nadu	
	exploitation of					

S.No	Prospecting	Date of	Name of	Period	Granted	Mine
	License/ Letter of	Grant	the Mineral	of Grant	by	lease
	Intent (LoI)/ Grant		& (Major/			area in
	of Mine lease and		Minor)			Ha
	Lr No					
	Dunite in addition					
	to magnesite.					
3.	Ministry of Heavy	17.11.201	Magnesite	20	Ministry of	622.69
	Industries & Public	1	&Dunite	Years	Heavy	
	Enterprises, Gol,				Industries	
	vide memo dated			Cd a	& Public	
	17.1 <mark>1.2</mark> 011				Enterprise	
	transferred the				S	
	Refractory unit of		1 × 1 ×			
	M/s BSCL at	R	V E			
	Salem with all		-0-0	J´ ,		
	assets, and	A fai	ECOLOT PIO			
	liabilities to M/s	100				
	Steel Authority of					5
	the India Limited					<u>s</u>
	(SAIL).					
	Accordingly, M/s		40			
	Steel Authority of			12		
	the India Limited			E		
	(SAIL) owned the	C.D.	8	0		
	entire lease and	"ofec	s if She 15			
	Refractory Plant	See.				
	and named the	PC	CDEE		S	
	unit as SAIL		GRE		. C	
	Refractory				<u>ه</u>	
	Company Limited			e^X		
	(SRCL) w.e.f.	e-D-				
	16.12.2011. After	a d	menus			
	taking over SRCL					
	also continued					
	mining with valid					
	Consent to					
	Operate from					
	Tamil Nadu					
	Pollution Control					
	Board.					

Minutes of 29th EAC (NCM) during 9-10th May, 2024

S.No	Prospecting	Date of	Name of	Period	Granted	Mine
	License/ Letter of	Grant	the Mineral	of Grant	by	lease
	Intent (Lol)/ Grant		& (Major/			area in
	of Mine lease and		Minor)			Ha
	Lr No					
4.	Industries,	02.11.202	Magnesite	Lease	State	622.67
	Investment	2	& Dunite	valid up	Govt. of	hectare
	Promotion and			to	Tamil	S
	Commerce			20.04.2	Nadu	
	(MMA.1)			029		
	Department,	XXY C		Can		
	Secretariat,					
	Ch <mark>ennai -</mark> 600009,					
	T <mark>amil Nadu</mark> vide		1			
	their letter No	R				
	10839/MMA.1/2O1		-0-0	J'		
	9-2 Dated:	A fet.	ECOLOT PIS			
	02.11.2022 issued	100				
	Letter of Intent to					5
	SAIL Refractory		- 62			<u></u>
	Company Limited					
	in respect of the					
	mining lease	2 (D)		12		
	granted in G.O			E		
	No.853, dated	CD.		0		
	05.06.1979.	Potec	s if She 15			

Additional information as provided by the Project Proponent is given as under:-

- a. The application for renewal of mining lease was made by M/s Burn Standard Company Ltd. as per norms on 14.04.1999, i.e. one year before the expiry of mining lease and mining was continued under deemed condition with valid Consent to Operate (CTO) from Tamil Nadu Pollution Control Board.
- b. During the process of Transfer of lease in name of SRCL from BSCL, Government of Tamil Nadu sought for a payment of EC violation amount of Rs. 36.76 Crores in respect for G.O. No. 853.Subsequently, SRCL has paid EC violation amount of Rs. 36.76 Crores on 11.01.2022.

Details of grant of Mine Lease deed execution:

S.	Details of grant of Mine Lease	Period of	of Grant	Name of	ML
No	deed execution	From	То	the Mineral	area
					(Ha)
1.	Industries, Investment	02.11.2022	20.04.2029	Magnesite	622.69
	Promotion and Commerce			&Dunite	
	(MMA.1) Department,				
	Secretariat, Chennai -				
	600009, Tamil Nadu vide their				
	letter No 10839/MMA.1/2019-				
	2 dated 02.11.2022 issued				
	Letter of Intent to SAIL		Ca .		
	Refractory Company Limited				
	in res <mark>pect</mark> of the mining lease				
	gra <mark>nted in G.O</mark> No. 853, dated	1.			
	0 <mark>5.06.1979.</mark>		4		

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

Private land	Nil
Government land	622.69
Forest land	Not Applicable
T <mark>otal Mining lea</mark> se area (MLA), ha	622.69
Private land for crusher, workshop	Not Applicable
& other infrastructure outside the	
MLA	5

Mining Plan details: v.

v. Mining Plan details:				
Mining Plan including Progressive Mine Closure Plan	Letter No.	TN/SLM/MG&DU/ROMP- 1589.MDS		
(approved by Indian Bureau of	Date	03.08.2020		
Mines/DMG)	Mineral & (Major/Minor)	Magnesite: Major Dunite: Major		
	Mine Lease Area, Ha	622.69 Ha		
	Validity	5 years		
Mining Parameters	Quantitative Description			
Method of Mining	Other than Fully Mechanized Opencast Minin method			
Drilling/Blasting	6 m			
Geological Reserves	Magnesite: 23.95 Million Tonnes			
	on Tonnes			
Mineable Reserves	Magnesite: 0.745 Million Tonnes			
	Dunite:0.654 Millior	Tonnes		

Minutes of 29th EAC (NCM) during 9-10th May, 2024

29 | Page

Life of mine About 10 years (Based on detailed exploration life mine can change) Mine Bench Height & Bench Width 6/6m No. of Mine Benches NA Existing Depth, m bgl NA Ultimate Depth of Mining, m bgl Block II: 48m Ground Water Table, m bgl Pre-Monsoon: On the basis of depth of water leve the study area, the pre monsoonal depth to wa level varies from less than 25.78 to 61.12 m bgl in study area. Post-Monsoon: On the basis of depth of water leve the study area, the post monsoonal depth to wa level varies from less than 20.00 to 59.14 m bgl in study area. Details of ground intersection Water Intersection Water Maximum Depth of Working: 349m RL in Red H (Block-I) Maximum Depth of Working: 330m RL in Block From above it is clear that working will not interse ground water table. Individual bench slope 60° Overall pit slope 45°	Life of mine	About 10 years (Based on detailed exploration life of
Mine Bench Height & Bench 6/6m Width A No. of Mine Benches NA Existing Depth, m bgl NA Ultimate Depth of Mining, m bgl Block II: 48m Ground Water Table, m bgl Pre-Monsoon: On the basis of depth of water level the study area, the pre-monsoonal depth to water level varies from less than 25.78 to 61.12 m bgl in study area. Post-Monsoon: On the basis of depth of water level varies from less than 20.00 to 59.14 m bgl in study area. Details of ground intersection The Water table is found at a depth of 55m dure season. The depth of water levels in the above season the nearby wells. • Maximum Depth of Working: 349m RL in Red H (Block-I) • Maximum Depth of Working: 330m RL in Block From above it is clear that working will not interse ground water table. Individual bench slope 60° Overall pit slope 45° Details of existing/ proposed Not Applicable		About to years (based on detailed exploration life of
Mine Bench Height & Bench 6/6m Width NA Existing Depth, m bgl NA Ultimate Depth of Mining, m bgl Block II: 48m Ground Water Table, m bgl Pre-Monsoon: On the basis of depth of water level the study area, the pre monsoonal depth to walevel varies from less than 25.78 to 61.12 m bgl in study area. Post-Monsoon: On the basis of depth of water level the study area, the post monsoonal depth to walevel varies from less than 20.00 to 59.14 m bgl in study area. Details of ground intersection The Water table is found at a depth of 55m dual summer and 52m (285 to 290 m RL) during raseason. The depth of water levels in the above season the nearby wells. Maximum Depth of Working: 349m RL in Red H (Block-I) Maximum Depth of Working: 330m RL in Block From above it is clear that working will not interse ground water table. Individual bench slope 60° Overall pit slope 45° Details of existing proposed Not Applicable		mine can change)
No. of Mine Benches NA Existing Depth, m bgl NA Ultimate Depth of Mining, m bgl Block II: 48m Ground Water Table, m bgl Pre-Monsoon: On the basis of depth of water level the study area, the pre monsoonal depth to water level varies from less than 25.78 to 61.12 m bgl in study area. Post-Monsoon: On the basis of depth of water level the study area, the post monsoonal depth to water level varies from less than 20.00 to 59.14 m bgl in study area. Details of ground intersection water The Water table is found at a depth of 55m du summer and 52m (285 to 290 m RL) during raseason. The depth of water levels in the above season the nearby wells. Maximum Depth of Working: 349m RL in Red H (Block-I) Maximum Depth of Working: 330m RL in Block From above it is clear that working will not interse ground water table. Individual bench slope 60° Overall pit slope 45° Details of existing/ proposed Not Applicable	Mine Bench Height & Bench Width	6/6m
Existing Depth, m bglNAUltimate Depth of Mining, m bglBlock II: 48mGround Water Table, m bglPre-Monsoon: On the basis of depth of water level the study area, the pre-monsoonal depth to wa level varies from less than 25.78 to 61.12 m bgl in study area.Post-Monsoon: On the basis of depth of water level 	No. of Mine Benches	NA
Ultimate Depth of Mining, m bglBlock II: 48mGround Water Table, m bglPre-Monsoon: On the basis of depth of water level the study area, the pre monsoonal depth to wa level varies from less than 25.78 to 61.12 m bgl in study area. Post-Monsoon: On the basis of depth of water level the study area, the post monsoonal depth to wa level varies from less than 20.00 to 59.14 m bgl in study area.Details of ground water intersectionThe Water table is found at a depth of 55m dur summer and 52m (285 to 290 m RL) during ra season. The depth of water levels in the above season the nearby wells.• Maximum Depth of Working: 349m RL in Red H (Block-I) • Maximum Depth of Working: 330m RL in Block From above it is clear that working will not inters ground water table.Individual bench slope60°Overall pit slope45°Details of existing/ proposedNot Applicable	Existing Depth, m bgl	NA
Ground Water Table, m bglPre-Monsoon: On the basis of depth of water level the study area, the pre-monsoonal depth to wa level varies from less than 25.78 to 61.12 m bgl in study area.Post-Monsoon: On the basis of depth of water level the study area, the post monsoonal depth to wa level varies from less than 20.00 to 59.14 m bgl in study area.Details of ground water intersectionThe Water table is found at a depth of 55m du summer and 52m (285 to 290 m RL) during ra season. The depth of water table fluctuation is veri by observing the water levels in the above season the nearby wells.• Maximum Depth of Working: 349m RL in Red H (Block-I)• Maximum Depth of Working: 330m RL in Block From above it is clear that working will not inters ground water table.Individual bench slope60°Overall pit slope45°	Ultimate Depth of Mining, m bgl	Block II: 48m
Details of ground intersectionwaterThe Water table is found at a depth of 55m du summer and 52m (285 to 290 m RL) during ra season. The depth of water table fluctuation is veri by observing the water levels in the above season the nearby wells.• Maximum Depth of Working: 349m RL in Red H (Block-I)• Maximum Depth of Working: 330m RL in Block From above it is clear that working will not inters ground water table.Individual bench slope60°Overall pit slope45°Details of existing/ proposedNot Applicable	Ground Water Table, m bgl	Pre-Monsoon: On the basis of depth of water level of the study area, the pre monsoonal depth to water level varies from less than 25.78 to 61.12 m bgl in the study area. Post-Monsoon: On the basis of depth of water level of the study area, the post monsoonal depth to water level varies from less than 20.00 to 59.14 m bgl in the study area.
intersectionsummer and 52m (285 to 290 m RL) during ra season. The depth of water table fluctuation is veri by observing the water levels in the above season the nearby wells.• Maximum Depth of Working: 349m RL in Red H (Block-I)• Maximum Depth of Working: 349m RL in Block From above it is clear that working will not inters ground water table.Individual bench slope60°Overall pit slope45°Details of existing/ proposedNot Applicable	De <mark>tails of g</mark> round water	The Water table is found at a depth of 55m during
Individual bench slope 60° Overall pit slope 45° Details of existing/ proposed Not Applicable	intersection	 summer and 52m (285 to 290 m RL) during rainy season. The depth of water table fluctuation is verified by observing the water levels in the above seasons in the nearby wells. Maximum Depth of Working: 349m RL in Red Hills (Block-I) Maximum Depth of Working: 330m RL in Block-II From above it is clear that working will not intersect ground water table.
Overall pit slope 45 ⁰	Individua <mark>l bench</mark> slope	60 ⁰
Details of existing/ proposed Not Applicable	Overall pit slope	45 ⁰
	Details of existing/ proposed	Not Applicable
Crusher	Crusher	P-Domests
Mineral Beneficiation Not Applicable	Mineral Beneficiation	Not Applicable
RoM output size 2643936 MTPA ROM	RoM output size	2643936 MTPA ROM
I ransportation details including Within Lease	I ransportation details including	Within Lease
capacity of dumper/tipper, mode of transport and distance spoil banks by using Excavated ROM will be shifted spoil banks by using Excavator & 15 tonne tip combination Outside Lease	capacity of dumper/tipper, mode of transport and distance	After drilling blasting excavated ROM will be shifted to spoil banks by using Excavator & 15 tonne tipper combination Outside Lease

	The magnesite and dunite minerals from spoil bank will be transported to SRCL factory using hired trucks of 10 tonnes capacity.
Generation of Topsoil/OB & its	There is no generation of Top soil from the mine.
Management during plan	Entire Overburden/waste generated from the mine
period & conceptual period	has been planned to be dumped inside the existing
	mine lease area.
Generation of Mineral Rejects/	Entire Overburden/waste generated from the mine
Waste & its Management	has been planned to be dumped inside the existing
during plan period &	mine lease area.
conceptual period	Ar I

vi. Water requirement:

Total water requirement	90 KLD	Fresh water	90 KLD	
	LIV F	Treated water		
Sour <mark>ce</mark>	This water will be supp	lied from the av	ailable bore holes	
	present in the mining le	ease area.		
Permission for withdrawal/	PP has submitted the	e application to	Water Resource	
intersection along with Department, Chennai for ground water withdrawal.				
de <mark>tails of grant</mark> and its			N N	
va <mark>lidity</mark>				

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

Pa <mark>rticulars</mark>	Particular's Name	Distance & Dire	ctions
Village	Karuppur	1.22 Km in WSV	V
Town	Salem - Block (Block 1-3)	10 km in SE	
	(Block 4)	6 Km in SE	
Highway	NH 7/NH 44	Plack	Distance &
	- GRF	DIUCK	Direction
	Ga	Block- (1-3)	2 Km, SW
		Block 4	800 m, NE
Interstate	None within 10 km radius	-	
Boundary	- aymence		
Railway	Salem Railway station	3 Km	
Station/Railway			
line			
Water Bodies	SarbangaNadiTirumanaimuttar	7 Km in W	
	River	2.5 in E	
Forest	Nagarmalai RF	1.1K in E	
	Kumubalpatti RF	100 m in NE	
	Kanjeri RF	6.7Km in N	

Pannikaradu RF	3.2Km in N
Kanjamali RF	6.8 Km in SW
Kapputu RF	4.8 km in E
Maryland RF	9.6 in NE
Sanyasi Malai	9.0 in NE
AtturGhat Extension	9.2 Km in N
AtturGhat	9.2 Km in N
Kanjeri Extension	9.3 Km in N

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/	Yes/No	Details of Certificate/letter issued by
Environmental Sensitivity Zone		the concerned Department
		mentioning the Lr no, date of grant
	T.	and remarks
Forest Land within the mine	No	None within 10 km radius
lease area and (if yes) status of	1	~ 5
Forest Clearance	र्शः इधान	
National Park	No	None within 10 km radius
Wildlife Sanctuary	No	None within 10 km radius
El <mark>ephant/Tiger</mark> Reserve	No	None within 10 km radius
Eco-Sensitive Zone(ESZ) /Eco-	No	None within 10 km radius
S <mark>ensitive Area (</mark> ESA)		
Coastal Regulation Zone (CRZ)	No	None within 10 km radius
Schedule-I Species (No.s and	Yes	1. Gaur (Bosgaurus),
name of schedule-I Species	A	2. Bonnet macaque
with authenticated letter)	Prects of SW	(Macacarad <mark>ia</mark> ta)
		3. Jungle cat (Felischauskelaarti)
10 A	PC CPF	4. Small Indian civet
	- GRI	(Viverriculaindica)
		5. Sambar (Rusa unicolor)
		6. Golden jackal (Canis aureus)
	P. D	7. Sloth bear (Melursusursinus)
	raymen	8. Honey badger
		(Mellivoracapensis)
		9. Indian Porcupine (Hystrixindica)
		10. South-Eastern langur
		(Semnopithecuspriam)
		11. Indian chevrotain
		(Moschiolaindica)
		12. Rusty-spotted cat
		(Prionailurusrubiginosus)

		13. Asian palm civet
		(Paradoxurushermaphroditus)
		14. Bengal fox (Vulpesbengalensis)
		15. Indian Pangolin
		(Maniscrassicaudata)
		16. Indian muntjak
		(Muntiacusmuntjak)
		17. Gray slender loris (Loris
		lydekkerianus)
	c	18. Indian Peafowl (Pavocristatus)
-KY	<u> </u>	19. Crested Serpent Eagle
		(Spilornischeela)
		20. Russell's viper (Daboiarusselii)
	T	21. Indian Python (Python molurus)
	Q IV	22. Common krait
		(Bungaruscaeruleus)
Wildlife Conservation Plan	Yes	Schedule-I Species are present in
	8	the study area, for which a
× /		Conservation Plan for an amount of
		Rs 43.30 Lakhs has been prepared.
		The Conservation Plan has been
		approved by O/o PCCF, Chennai
Z		vide letter Ref No. WL5/21661/2023
24		dated 09.08.2023.

ix. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings	Area: 16.63 Ha.	
propo <mark>sed Contraction Contra</mark>	No. of Saplings: 41581	
Budget for green plant & plantation till the end of life of	153 Lakhs	
mine.		
Details of existing plantation and its survival rate	Area for Green belt:	
	58.26 Ha	
e-Paymonts	Survival Rate: 95%	
No. of tree cuts in the mine lease area and compensatory	Not Applicable	
afforestation		

x. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)				
Period of baseline data collection	March to May 2021			
Season (Summer / Pre-monsoon / Post- monsoon / Winter)	Pre-Monsoon			
Predominant Wind direction (From)	Northeast (NE)			
Ambient Air Quality (8) and results	PM ₁₀ – 74.10 to 80.74 µg/m ³			

	PM 2.5- 36.76 to 43.97 µg/m ³
	SO ₂ – 13.42 μg/m ³ to 8.7 μg/m ³
	NO _x – 23.01 μg/m ³ to 16.66 μg/m ³
	$CO = 0.7 \text{ to } 0.9 \text{ mg/m}^3$
Noise level (8 locations) and results	The Leq values at this location for day and
	night time was observed to be /1.9 and
	63.0 dB (A) respectively, which can be
	Attributed to local prevailing environment
	(Mining, industrial, Railway sloing and Highway) Howayar the recorded point
	Highway). However, the recorded hoise
	zono limite (75 dB (Λ))
Water Quality (8 locations) and results	Ground Water: All the Parameters Like
Water Quality (0 locations) and results	pH varies from 7.42 to 7.77 Total
	Hardness varies from 308 45 to 378 46
	mg/I Total Dissolved Solids varies from
	562 to 697 mg/l, Chlorides 82.53 to 115.23
	mg/L etc. are found within the permissible
1 . V a 24	limits. Bacteriological studies revealed the
	absence of Total coliform.
	Surface Water: All the Parameters Like
	pH varies from 7.47 to 7.8, Total Hardness
	varies from 641 to 740.82 mg/l, Total
	Dissolved Solids varies from 818 to 1048
Z E	mg/l, Dissolved Oxygen – 5.1 mg/l to 6.5
	limite Total Coliform count is measured
	900 to 1600 MPN/100ml
Soil Quality (8 locations) and results	pH- 7 58 to 7 76
Con Quality (Crocations) and results	Organic matter- 0.31% to 0.7%
	Electrical Conductance - 0.26 uS/cm to
	0.364 mS/cm
	Available Nitrogen - 126 Kg/ha to 247
92	Kg/ha
	Available Phosphorous - 9.86 kg/ha to
e-Pave	18.11 Kg/ha
- ciyii	Available Potassium - 107.59 Kg/ha to
	225 Kg/ha
Traffic study (one locations) and results	The proposed project will not cause major
	impacts due to increase in the PCU/Day
	which is 366 PCU/day. The LOS study
	snows that the existing traffic scenario is
	Good and the free flow of vehicles is
	the mine project the traffic density will
	ine mine project the trainic density will

increase	and	the	value	of	LOS	will	not
change.							

xi. Public Hearing (PH) Details:

Advertisement for PH with date (name of	The Indian Express Dated: 19.05.2023
major national daily and one regional	DhinaThanthi Dated: 19.05.2023
vernacular daily newspaper)	
Date of PH	04.07.2023
Venue	M/s Rajam Thirumana Mandapam, Indhira
	Nagar, near Rajam Hospital, Karuppur
N/C	Village, Omalur Taluk, Salem District
Chaired by	Shree S. Karmegam, I.A.S, District
	Collector, Salem
Main iss <mark>ues raise</mark> d during PH	 Employment opportunities for locals
	 Health facilities to be provided
	 Massive afforestation
1 A 24	• Mining will be done as per statutory
	norms
Budget proposed for addressing issues	5 Lakhs for a period of five year
raised during PH over 3 years	S S

xii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Consent to Operate	Last renewal of consent under Air Act was obtained vide order no.4103 dated 29.05.2013 valid till 31.03.2014 Last renewal of consent under Water Act was obtained vide order no.6484 dated 29.05.2013 valid till 31.03.2014. PP have informed that Order no 4103 dated 29.05.2013 was revoked vide Proc. No T7/TNPCB/F-0950/RL/SLM/2013 Dated 19.07.2017
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	The project has violated the EIA notification as the mine has been operating without Environmental Clearance since the inception of mining lease and during renewal of lease in year 2000, which is violation of EIA notification 2006. The mine was operated based on Consent to Operate (CTO) from Tamil Nadu Pollution Control Board since 1991.

	The details of Department o Nadu vide lette dated 1.11.20 dated 08.05.2 Annual Pro	past production are f Geology and Minir er no Roc.45/2018/ M 018 and Roc.333/20 017. oduction from 1993-9	authenticated by ng, Salem, Tamil 1ines A/Mag-1 on 17/ Mines A on 24 to 2016-17
	Year	Magnesite (TPA)	Dunite (TPA)
	1993-1994	62000	13929
-K14	1994-1995	61000	7000
	1995-1996	46000	14000
	1996-1997	50000	7000
	1997-1998	58000	5500
	1998-1999	57000	5500
	1999-2000	48000	4250
	2000-2001	39500	9000
\geq	2001-2002	35900	9000
	2002-2003	32500	11000
	2003-2004	61000	16000
	2004-2005	75500	8000
Z.	2005-2006	69000	20000
	2006-2007	68000	33000
	2007-2008	89000	23000
2	2008-2009	135000	28000
3.	2009-2010	64100	22000
	2010-2011	85000	30000
	2011-2012	68960	37870
	2012-2013	80000	23000
e	2013-2014	5000	15000
	2014-2015	65000	13600
	2015-2016	58000	12800
	2016-2017	42000	1500

xiii. Rehabilitation & Resettlement (R&R):

R & R details	The Project has submitted that no R&R issues
	involved.

xiv. Court case details:

Court Case, No and	1. The District Environmental Engineer, Tamil Nadu Pollution
its present status	Control Board, Salem, filed credible action case against
	SRCL before the Judicial Magistrate -II, Salem, vide
	CC/0000196/2024.
	2. Revision application No. 27(01)/2023/RC-II is filed before the
	Revisional Authority under section 30 of the Mines & Minerals
	(Development and Regulation) Act, 1957, where the
	petitioner is SRCL and respondent is Govt. Of Tamil Nadu.
Undertaking by	PP has submitted an affidavit in Rs. 100 non judicial stamp (DR
Project Proponent	120414) dated 27.04.2024 stating that SRCL is a party in two
w.r.t court case	cases as stated above.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated	PP has submitted an affidavit on Rs. 100 non
30.05.2018	judicial stamp (DR 120414) dated 27.04.2024 in
	accordance with Ministry's OM dated 30.05.2018.
Undertaking by Project Proponent	PP has submitted an undertaking dated
in EIA/EMP report	27.04.2024 stating that in case any deviation in
~ /	data found in any of the documents, the
	authorized signatory shall be held responsible
	and furthermore, the above said project shall be
	rejected for grant of amendment in EC.
Undertaking by Consultant in	The consultant has submitted and undertaking in
EIA/EMP report	its letterhead dated 27.04.2024 stating that
A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	contents in the form of information and data of the
	EIA Report has been prepared by them and are
3	factually correct and not copied from any other
	EIA Reports.
Plagiarism Certificate	PP has submitted Plagiarism certificate
	(Plagiarism Checker-X-Report) dated
	25.04.2024.

xvi. Budget for remediation plan, natural resource augmentation plan and community resource augmentation plan

SI. No.	Description	Estimated cost
1	Remediation Plan	₹ 1,44,50,000.00
2	Natural Resources Augmentation Plan	₹ 1,46,75,000.00
3	Community Resources Augmentation Plan	₹ 1,47,76,000.00

Total	₹ 4,39,01,000.00

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

Activities	Capital Cost (Crores)	Recurring Cost (Lakhs/Annum)
Air Pollution Control Measures	0.60	3.0
Water Pollution Control Measures	0.32	10.0
Noise Pollution Control Measures	-	3.0
Greenbelt Development	1.0395	4.0
Rain Water Harvesting	0.05	1.0
Fire Fighting and Safety measures	0.03	24.0
Total	2.0395	45
Total EMP Budget	248.95	Lakhs

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)	
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	2.4895	
Project Cost	3.0	
Employment (No.s)	600 persons	

3. **Observation and Recommendation of the Committee:**

The instant proposal is for Environmental Clearance under violation category as per Ministry's Notification vide S.O. 804 (E) dated 14.03.2017. The project Proponent has informed to the Committee that the mining activity was suspended since 10.01.2017.

The EAC noted that the baseline data submitted by PP is from March to May, 2021. EAC was of the opinion that the presented dataset is not good enough to represent the current scenario, accordingly, EAC requested to project proponent to collect fresh baseline data over a period of one month to validate the existing data. The EAC also enquired about the availability of the SEIAA approved DSR for the minor mineral Dunite. PP stated that they are not aware at present and they will submit the same. EAC also asked the PP regarding the status of consent to operate. PP informed that their consent was valid till 31.03.2014. EAC enquired whether any action has been taken by SPCB since the PP operated the mine without consent till 10.01.2017. PP informed that no action has been taken by SPCB with regard to the operation of mine after the expiry of CTO.

Further, while appraising the remediation plan, CRAP and NRAP, the EAC noted that PP has not taken a holistic approach to assess the damages caused by it to the environment. EAC also noted that the PP has incorporated certain aspects of public

hearing into its community resource augmentation plan (viz sports facility, employment, skill development etc), accordingly, EAC advised the PP to rectify the same. EAC also mentioned that PP should include the damages caused due to point/line sources and its effect on the existing fauna/environment (land, water, air) in its remediation plan. EAC also reiterated that PP should specifically define the parameters in its remediation plan, CRAP and NRAP. With regard to the EMP presented by PP, EAC observed that recurring cost has not been included. EAC also observed that the budget of proposed plantation is inadequate and asked the PP to put forward a realistic and practical budget for implementation of the same. The EAC opined that the PP, while revising the damage assessment shall include the parameter of damages with respect to the receptors. The EAC was of the opinion, that PP shall revise the above said items and come up with a tangible action plan that can be monitored by the Regional office of the Ministry. Based on the above, the EAC **deferred** the proposal for the want of following information: -

- i. The Project Proponent needs to collect fresh One-Month Baseline data (Preferably non-monsoon) to validate the existing dataset.
- ii. The Project Proponent needs to submit the SEIAA approved DSR for Dunite.
- iii. **PP shall submit the Chronology of Mine lease from the inception of Mine.**
- iv. PP needs to submit the detailed transportation plan including the route that it proposes to use for transportation. PP shall show the proposed route on KML.
- v. PP shall explore the possibility of using conveyor belt transportation system upto the nearest Railway siding.
- vi. PP needs to record the drone video of the complete Mine lease area showing the Mine pit, overburden, and plantation and existing transportation.
- vii. PP shall submit the revised remediation plan, CRAP and NRAP taking into consideration of all the factors as pointed out by EAC.
- viii. PP should also include the cost of damage due to transportation of mineral within the violation period due to mineral transportation upon the existing tree and road.
- ix. PP should recalculate and submit the revised EMP cost and Public Hearing Cost after associating the activities from Remediation Plan, NRAP and CRAP.
- x. PP needs to submit the detailed breakup of the health facilities that shall be provided to mine worker and local villagers
- xi. PP shall submit the revised budget for plantation.
- xii. PP needs to submit the detail management plan for mineral rejects and interburden.
- xiii. The Project Proponent needs to submit water withdrawal permission from CGWA. PP should not carry out secondary blasting, instead possibility of introducing rock breaker should be explored to break oversized boulders.

1.3 Dhaukan-Dhaurra-Urdaurra Iron Ore Block with total production capacity of 46,90,419.50 TPA of R.O.M. (20,57,516.70 TPA of Iron ore & 26,32,902.80 TPA of

Waste) along with installation of 500 TPH capacity of Jaw Crusher & Cone Crusher in ML area of 153.031 ha by M/s Pacific Iron Manufacturing Ltd located at Village(s) Dhaukan, Dhaurra and Urdaurra, Taluka Prithvipur, District Niwari, State Madhya Pradesh [Online Proposal No. IA/MP/MIN/469536/2024, File No. IA-J-11015/29/2024-IA-II(NCM), EIA Consultant - Gaurang Environmental Solutions Pvt. Ltd.] - For Terms of Reference reg.

The proposal is for Terms of Reference for Dhaukan-Dhaurra-Urdaurra Iron Ore Block with total production capacity of 46,90,419.50 TPA of R.O.M. (20,57,516.70 TPA of Iron ore & 26,32,902.80 TPA of Waste) along with installation of 500 TPH capacity of Jaw Crusher & Cone Crusher in ML area of 153.031 ha by M/s Pacific Iron Manufacturing Ltd located at Village(s) Dhaukan, Dhaurra and Urdaurra, Taluka Prithvipur, District Niwari, State Madhya Pradesh.

2. The details of the project as ascertained from the document 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 25°13'12.00"N to 25°13'42.58"N and Longitude 78°36'46.39"E to 78°38'28.49"E. The mine lease area falls under the Survey of India Toposheet No: 54 K/12 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) of Mining of Minerals. The project attracts General condition due to the presence of Orchha Wildlife Sanctuary at a distance of 2.26 Km and its Eco Sensitive Zone (ESZ) at a distance of 0.11 km from the mine area.
- iii. The project is at distance of 4.26 km from Uttar Pradesh-Madhya Pradesh Interstate Boundary in the WSW direction from the mine site and falls under Category "A" of the schedule of the EIA Notification, 2006.
- iv. Details of Mine Lease:

S.	Prospecting	Date of the	Name of	Period	Granted by	Mine
No.	License/ Letter of	grant	the	of	. 81	lease
	Intent (LoI)/		Mineral &	Grant	2	area in
	Grant of Mine	е-р	(Major/	5		На
	lease and Lr No		Minor)			
1.	LOI	27.07.2022	Iron Ore	50	Secretary,	153.031
			(Major	years	Govt. of	
			Mineral)		Madhya	
					Pradesh,	
					Mineral	
					Resource	
					Department	

Details of Land Use/ Land Cover of the Mine Lease Area: ٧.

Land Use/ Land Cover of the Mine Lease Area:					
Private land	:	73.282			
Government land	:	79.749			
Forest land	:	00			
Total Mining lease area (MLA), ha	:	153.031			
Private land for crusher, workshop & other infrastructure outside the MLA	:	NA			

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

Private land, ha	:	73.282
Government land, ha	:	79.749
Forest land	:	00
Total Mining lease area (MLA), ha	:	153.031
Private land for crusher, workshop & other infrastructure outside the MLA	:	NA
vii. Details of Mining plan:		

Details of Mining plan: vii.

Mining Plan including	:	Letter No.	Nil			
Pro <mark>gressive Mine</mark> Closure	1	Date	Submitted on 20.03.2024			
Plan (approved by Indian Bureau of Mines/DMG)		Mineral & (Major/ Minor)	Major			
	1	Mine Lease Area, Ha	153.031 <mark>H</mark> a.			
Additional information (if		Mining Plan along with the	PMCP has been submitted			
an <mark>y)</mark>		to the Office of IBM, Jabalpur on dated 20.03.2024.				
	2	Approval is in under proce	ess.			
Mining Parameters	ŝ	Quantitative Description				
Method of Mining	:	Opencast Mechanized Me	ethod			
Drilling/Blasting		Drilling: Self-Propelled	Hydraulic Drill with Top			
2.		Hammer				
		Blasting: Controlled blast	ing will be done under the			
×11.00		supervision of competent	Mining Engineer following			
		safety precautions as laid	d down in the Metalliferous			
		Mines Regulation 1961	6			
Geological Reserves	:	4,27,06,039.86 MT				
Mineable Reserves	:	2,85,50,437.93 MT				
Breakup of Total	••	46,90,419.50 TPA of ROM	1. (20,57,516.70 TPA of Iron			
Excavation (Topsoil/ OB/		ore & 26,32,902.80 TPA c	f Waste)			
SB/ IB/ Mineral Rejects/						
Waste, MTPA)						
Life of mine	:	50 Years				
Mine Bench Height & Bench	:	Bench height will be kept	6m and width of the bench			
Width		will be kept 6m.				

No. of Mine Benches	:	New pit -A=14 no's of benches, New pit -B =8 no's			
		benches as per First five year working proposal and			
		end of conceptual period about dhaukan block =22-25			
		no's benches and Dhaura Urdaura blocks =18-23 no's			
		benches will be developed.			
Existing Depth, m bgl	:	1-6m depth			
Ultimate Depth of Mining, m	:	222 mRL			
bgl					
Ground Water Table, m bgl		215 mRL			
Details of ground water		At the end of fifth year, mine working will confined upto			
intersection		222 mRL which is 36 m below the lowest elevation i.e.			
		258 mRL and 7m above the ground water table found			
		at 215 mRL.			
		No water table intersection during the plan period.			
Individual bench slope		88 ⁰			
Over <mark>all pit slope</mark>	Ŕ	450			
Details of existing/	×	Proposed Jaw Crusher (500 TPH) & Cone Crusher			
pro <mark>posed Crushe</mark> r	1	(50 <mark>0 TPH)</mark>			
Mineral Beneficiation	:	NA			
R <mark>oM output siz</mark> e	:	Lumps & Fines			
Transportation details		Mined mineral will be transported through dumper of			
in <mark>cluding ca</mark> pacity of	. \	capacity 24 T by the road (via NH-539: 4.0 Km, NE			
dumper/tipper, mode of	\overline{z}	direction).			
transport and distance					
Gen <mark>eration of</mark> Mineral	: As per the mining plan, approx. 94,10,794.80 Tonne				
Reje <mark>cts/ Waste &</mark> its		of Mineral waste will be generated which, will be			
Mana <mark>gement during</mark> plan		temporarily dumped within the mine lease boundary			
period & conceptual period		and further will be used for backfilling of some part of			
		excavated area.			

viii. Water requirement details:

	-	
Total water		15 KLD e. De la constante de l
requirement		aymento
Source	:	Ground water
Permission for	:	NoC from CGWA will be taken and submitted during the final
withdrawal/		EIA/ EMP report.
intersection along		
with details of		
grant and its		
validity		

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

Particulars	Particular's Name	Distance (Km) &	
		Direction	
Village	Hamirpur	0.07, SW	
Town	Prithvipur	9.63, E	
Highway	NH-539	4.0, NE	
Interstate Boundary	Uttar Pradesh-Madhya Pradesh	4.26, WSW	
	Interstate Boundary		
Railway	Orchha Railway Station	19.31, North	
Station/Railway line	Can		
Water Bodies	Barda Nala	2.0, N	
Forest	Tapariyan Hararan P.F.	0.38, N	

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

Forest Land/ Protected	Yes/No	Details of Certificate/
Area/ Environmental	A 20017 DO	letter issued by the
Sensitivity Zone		concerned Department
\sim		mentio <mark>ni</mark> ng the Lr no,
		date of grant and remarks
Forest Land within the	No forest land is involved within	Certifica <mark>te</mark> will be
m <mark>ine lease are</mark> a and (if	the Mining Lease area.	submitte <mark>d</mark> at the time of
ye <mark>s) status of</mark> Forest	Z D	final EC.
Clearance		
Nat <mark>ional Park</mark>	None within 15 Km radius	
Wildlife Sanctuary	Orchha Wildlife Sanctuary - 2.26	DCF certificate will be
	Km, NNW	submitted at the time of
10 A	C CREEN	final EC
Elephant/Tiger Reserve	None within 15 Km radius	
Eco-Sensitive Zone	Eco Sensitive Zone (ESZ) of	DCF certificate will be
(ESZ)/	Orchha Wildlife Sanctuary - 0.11	submitted at the time of
Eco-Sensitive Area	km, WNW	final EC
(ESA)	a aymento	
Coastal Regulation	None within 15 Km radius	
Zone (CRZ)		
Schedule-I species	The proposal is for obtaining	
(Nos and name of	Terms of Reference. The details	
schedule-I species with	will be submitted in the final EIA/	
authenticated letter)	EMP Report and also presented	
	during the final EC presentation.	

Wildlife	Conservation	The proposal is for obtaining	
Plan		Terms of Reference. The details	
		will be submitted in the final EIA/	
		EMP Report and also presented	
		during the final EC presentation.	

xi. Green belt/plantation details:

1			
Proposed area for green belt/ :		Proposed area for green belt: 50.5 Ha.	
plantation and no. of saplings		No. of saplings proposed: 1,26,225 saplings	
proposed			
Budget for green plant &	1	The proposal is for obtaining Terms of Reference.	
plantation till the end of life of		The details will be submitted in the final EIA/ EMP	
mine.		Report and also presented during the final EC	
Budget for nursery	•••	presentation.	
Details of existing plantation :		2 I V F	
and its survival rate			
No. of tree cuts in the mine :		A COLT DO	
lea <mark>se area</mark> and			
compensatory afforestation	1		
Particulars for Green belt/	1	Area covered (in Ha)	
pl <mark>antation</mark>			
7. <mark>5m barrier</mark> & non-		50.5	
mineralized zone			

xii. Rehabilitation& Resettlement (R&R):

R & R	There are approx. 25 no of household within site including human
detai <mark>ls</mark>	settlements over an area of 2.67 hectare. However, no mining activities
	will be carried near the settlement and proper safety boundary will be left
	around the settlement.

xiii. Court case details:

Court Case, No and its present	:	No court case pending against the Project
status	P	Proponent.

xiv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Rs.10.00 Crore
Employment (No's)	103

3. Observation and Recommendation of the Committee:

The instant proposal is for Terms of Reference considered at central level owing to the applicability of general condition i.e. the presence of Orchha Wildlife Sanctuary at 2.26 Km and ESZ at 0.11 km along with Interstate Boundary of UttarPradesh &Madhya Pradesh which is located at a distance of 4.26 km from the project boundary.

The PP presented the KML file and explained the existing environmental sensitive's to the EAC. The EAC noted that presence of Ken-Betwa river at distance of 4.7 Km from the project boundary and enquired whether the lease area is part of Ken-Betwa Project. The PP informed that they are not aware, the EAC asked the PP to obtain a certificate from the State Govt. stating that proposed mine lease is not a part of Ken-Betwa project. The EAC also enquired about the transportation route, PP informed that they will use the existing national highway (NH-539) to transport the ore to their existing plant. The EAC asked the PP to submit the detailed transportation route. The EAC also asked the PP to explore the possibility of setting up a Conveyor belt system upto the Railway siding. Further PP informed that approximately 25 houses exist within the ML area. Accordingly, the EAC asked the PP to conduct a detail socio-economic study of the inhabitants within the lease area. The project proponent/Consultant has not presented their presentation satisfactorily and therefore cautioned the consultant/PP to improve their presentation skill in the next EAC meeting.

Based on the above observation, the EAC **deferred** the proposal and asked to submit the requisite information:

- i. PP shall submit a certificate from the State Government stating that the lease area is not a part of Ken –Betwa Project.
- ii. PP shall explore the possibility of implementation of Conveyor belt upto the nearest Railway siding and submit the detail plan with date of completion of project.
- iii. PP shall submit the detailed socio-economic study of the inhabitants present within the lease area.
- iv. PP shall submit detail waste management plan.
- v. PP shall install permanent water sprinklers instead of water tanker.
- vi. PP shall submit break up of project cost.

1.4 Mining of Chrome ore with enhancement in production capacity from 0.3 to 0.9 MTPA in the ML area of 382.709 ha by M/s Odisha Mining Corporation Ltd. located at villages Sukurangi, Saruabil, and village limits of Ostapal, Kamarda and Talangi, Tehsil Sukinda, District Jajpur, Odisha [Online Proposal No. IA/OR/MIN/458763/2024, File No. J-11015/348/2015-IA. II(M), EIA Consultant - Mecon Limited] - For Terms of Reference reg.

The proposal is for Mining of Chrome ore with enhancement in production capacity from 0.3 to 0.9 MTPA in the ML area of 382.709 ha by M/s Odisha Mining Corporation

Ltd. located at villages Sukurangi, Saruabil, and village limits of Ostapal, Kamarda and Talangi, Tehsil Sukinda, District Jajpur, Odisha.

2. The details of the project as ascertained from the document 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 21°02'32.10822"N to 21°03'46.96573"N and Longitude 85°47'47.57164"E to 85°49'19.86763"E. The mine lease area falls under the Survey of India Toposheet No: F45N16 and falls in Seismic Zone-II.
- ii. The project falls under Category "A" under schedule no. 1(a) of Mining of Minerals of the schedule of the EIA Notification, 2006 and its subsequent amendments.

ToR Pro <mark>posal No.</mark>	IA/OR/MIN/458763/2024
Online application date for Form-I	25 th March 2024
Documents Submitted	Cover letter, CAF, Form 1 (Part A), Form 1 (Part B), kml file of the ML area, Sol Toposheet Map, Lease Deed, Authorization of Applicant, Conceptual Plan, Mining Plan drawings.
Production capacity in million tonnes per annum only	0.9 MTPA (ROM) Chrome Ore
Waste	8.5981 MTPA (Waste Rock)
Total Excavation(with break-up) in million	9.4981 MTPA
ton <mark>nes per annum</mark>	C Barren Store
per annum only	0.9 MITPA
Crusher	1 x 250 tph Primary Crusher and 1 x 250 tph Secondary Crusher will be set up. The Secondary Crusher will process the output of the Primary Crusher. 1 x 250 tph triple deck vibrating screen will be installed to screen crushed ROM to separate out -10 mm material (containing >40% Cr_2O_3) – the final product.
EIA/EMP uploaded on	The instant proposal is for approval of ToR. EIA-EMP report will be prepared based on approved ToR.
Previous EC details	Accorded by MoEFCC vide letter No. J-11015/348/2015- IA.II(M) dated 30.07.2020 for Chrome Ore production capacity : 0.3 MTPA

iii. Detail of ToR:

iv. Details of Mine Lease:

Application for the Mining lease area	25.04.1970
and Date	
Validity of mine lease	19.09.2030
Chronology of	From 20.09.1980 to19.09.2000 [Initial]
lease extension if	From 20.09.2000 to19.09.2020 [1st Extension]
any	From 20.09.2020 to19.09.2030 [2nd Extension]
Additional	Sukurangi ML was granted and executed in favour of M/s
information(if any)	Sirajuddin & Co. for a period of 20 years from 26.03.1959 to
	25.03.1979. After 4 years of operations, it was determined on
	05.04.1963 by the State Govt. Odisha Mining Corporation (OMC)
	was then allowed by the State Govt. vide their letter No. III(G)M,
	13/70-5592-MG, dated 20.07.1970 to operate the said lease as an
	agent of the State Govt. till formal grant of the said lease to OMC
	in 1971 by expanding the area broken by M/s Sirajuddin & Co.
	Govt. of Odisha in their erstwhile Mining & Geology Dept.
. .	Proceeding No. III(G)-MG-10/78-7924 dated 05.08.1978 and
a de la companya de l	granted a Mining Lease for exploration of chromite in Sukurangi
	chromite mines over an area of 382.709 ha for a period of 20
	years. Lea <mark>se ha</mark> s been extended up to 19-09-2030.
v Details of Mini	ng plan.

v. Details of Mining plan:

	Letter No.	MCDR-MiFL0CR/12/2	2023-BBS-IBM_RO_E	BBS	
	Date	19.03.2024			
	Validity	2024-25 to 2028-29			
Mining Parameters	Quantitative	Description			
Bench Height	6 m	As and	S.		
Bench Width	<mark>10 m</mark>	C GREE!	5		
Method of Mining	A-Mechanize	d, Open Cast Mining			
Individual bench	70°				
slope	er				
Overall pit slope	24°-30°				
Drilling/Blasting	g/Blasting HEMM with deep hole drilling & blasting with combination			ation of	
	loaders and tippers.				
RoM output size	Ту	pe of crusher	Product size in mm		
	Primary C	rusher (Jaw Crusher)	-100		
	Secondary	Crusher (Jaw Crusher)	-50		
	Triple Deck Vibrating Screen -10				
Life of mine	16 years on t	he basis of Proven Rese	erves. May be revised	on the	
	basis further detailed exploration.				

Transportation	By trucks to consumers of nearby railway siding(s) at buyers'
details	discretion
Dumpers capacity	35 t

vi. Details of Land Area Breakup (in hectares):

Private land	97.5544 ha
Government land	17.9446 ha
Total Mining lease area (MLA)	382.709 ha
Additional information(if any)	Forest Land (267.210 ha)

vii. Nearest village / town/ highway/railway station / water bodies/monument

Particulars	Particular's Name	Distance & Directions		
Nearest railway	Baghupal on Padapahar Jn.	~21.5 km (E)		
station				
Populated areas	Brahamnipal town	~23 km (SE)		
Nearest Highway	Daitari- Paradeep Express	~18 km (NE)		
S I	Highway			
Water Bodies	a. Damsal Nala	0 (Dam <mark>sa</mark> l Nala flows		
	b. Talan <mark>gi Na</mark> la	through ML)		
	c. Nadibarana Nala	1.4 km (NE)		
	d. Pandaral Nala	3.8 km (W)		
		7.5 km (S)		

viii. Water requirement

Total water	Potable: 60 m ³ /day	Fresh water	60 m ³ /day
requirement	Industrial: 530 m ³ /day	Treated	530 m ³ /day
3	10 A	water	. 81
Source	Industrial: Recycled effluer Potable: Bore-wells	nts/mine discha	irge water
Permission	NOC obtained from CGWA/NOC/MIN/REN/2/2 valid upto 30.11.2023. considerations.	CGWA vic 2022/7118, da Renewal of	le letter No. ted 02.11.2021, NOC is under
Additional information	No fresh water is utilized for	or Industrial pur	pose.
(if any)			

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/	Yes/No	Details of Certificate/letter/Remarks
Environmental Sensitivity		
Zone		
Forest Land	Yes	Forest Clearance obtained for the entire
National Park	No	Forest Land (267.210 ha) within the ML
Wildlife Sanctuary	No	area.

Eco-Sensitive Zone(ESZ)	No	
/Eco-Sensitive Area(ESA)		

x. Availability of Schedule-I species in study area – Available/ Not Available If available - authenticated list of flora/fauna details

Schedule-1	Yes/No	Details of Certificate/letter/Remarks
species		
Schedule-I	Yes	Schedule-I fauna found in the 10 km study area are
species		Ratel, Leopard, Sloth bear, Indian Elephant, Mouse
		deer, Pangolin, Wolf, Bengal Monitor Lizard, Python,
	1.1	Peafowl.
	~	31
Status of Wildlife	Approved	Revised Site-Specific Wildlife Conservation Plan
Conservation Plan		approved by PCCF (WL) & CWLW, Odisha vide
		memo no. 8426/7WL-FD & WLC-159/2020 dated 16-
Additi <mark>onal</mark>		10-2020.
information (if		्र इतिनि र र
any)	Q'	

xi. The status of Forest Clearance/Wildlife Clearance/CRZ/CGWA, if applicable: The mine lease area comprises of 267.21 ha of Forest Land. Stage – II FC for the entire forest land (267.210 ha) within the ML area has been accorded. Details of FC accorded by MoEFCC are given below:

- a. Stage-II FC over 104.79 ha Forest land within ML area received vide letter no. F. No. 8-104/2000-FC dated 21.07.2011.
- b. Stage-II FC over 162.42 ha (including 24.15 ha for Safety Zone) Forest land within ML area received vide letter no. F. No. 8-22/2016-FC dated 31.07.2023.
- xii. Status of CTE/CTO.
 - a. Consent to Establish (CTE) for 0.3 MTPA of Chrome ore has been granted by State Pollution Control Board, Odisha vide letter no: 7315/IND-II-CTE-6476 on dated 21.05.2021.
 - b. Consent to Operate (CTO) has been granted from the State Pollution Control Board, Odisha vide letter no 4412/IND-I-CON-388 dated 28.03.2024for 0.3 MTPA of Chrome ore and is valid up to 31.03.2025.

Proposed SI. area for N Year green o	Green Belt d to b	e Number of Plants	Expecte d	Estimated Expenditur e (INR)
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xiii. Green belt/plantation details:

belt/plantatio			Locatio	Covered	Propose	Survival	
n			n (s)	(Ha)	d	Rate (%)	
		2024	Existing				
	1	-	Dump	0.75	500	>85%	702479
		2025					
		2025	Existing				
	2	-	Dump	0.75	500	>85%	702479
		2026					
		2026	Existing				
	3	-	Dump	0.75	500	>85%	702479
		2027	KIY		C.a		
		2027	Evicting				
	4	-	dump	0.75	500	85%	702479
		2028	uump		Ł		
		2028	Existing	L V	0		
	5	-	Dump	0.75	500	85%	702479
5		2029	Damp	Crown 6			

Particulars for Green belt/plantation	Area covered (in		
	Ha)		
7. <mark>5 m wide all a</mark> long ML area (except common boundary between	<mark>6</mark> .35		
adjoining South Kaliapani ML of OMC)			
50m on either side of Damsal nala	<mark>1</mark> 8.00		
10 m on either side of the road	1.9		

xiv. Court case details:

Court Case

No

xv. Rehabilitation & Resettlement:

R & R details	No R&R	
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xvi. Affidavit/Undertaking details:

Affidavit/Undertaking	OMC	has	submitted	an	undertaking	by	way	of	notarized
	Affida	vit da	ated 03.04.2	2024	in complianc	e of	f the I	Mini	istry's OM
	no. 3-	50/20)17-IA.III(Pt	.) da	ated 30.05.20	18.			-

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Total Cost Rs. 296.02 Crores
	[Existing Cost – 32.02 Crores; Expansion Cost – 264 Crores]

Minutes of 29th EAC (NCM) during 9-10th May, 2024

Employment	628

xviii. Additional information submitted by Project Proponent:

Violation of EIA Notification-1994/2006 for producing minerals without prior EC from Sukurangi Chromite mines during 1993-94 to 2008-09. Demand Notice for depositing Rs. 3,90,64,416 (Rs. Three crore ninety lakh sixty-four thousand four hundred sixteen only) was issued by the office of Dy. Director of Mines, Jajpur Road Circle, Jajpur Road vide letter no. 547 dated 10.04.2018. OMC paid the entire penalty amount towards the demand raised.

3. Observation and Recommendation of the Committee:

The Instant proposal is for Terms of Reference for enhancement in production capacity from 0.3 to 0.9 MTPA without change in ML area for Sukurangi Chromite Mines. As per the kml file shown during the presentation, the EAC noted the presence of Nalah passing through the ML area. In order to manage the same, the Project Proponent was asked to prepare the conservation plan for Nallah. The EAC advised the Project Proponent to incorporate the advance technology by incorporating the latest machinery having the least carbon emission rate and having higher capacity. The EAC also asked the Project Proponent to submit the report on existing carbon emission rate and in which year the carbon emission will be neutralised.

Subsequently, the EAC emphasised that PP should submit a dump management plan incorporating the garland drain and plantation. The EAC made an observation that the PP needs to be cautious while dumping the Overburden, they should avoid dumping the overburden in the mineralised area and the forest area. The EAC also advised the PP to prepare progressive backfilling plan in order to reduce the dump accumulation.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Chrome ore with enhancement in production capacity from 0.3 to 0.9 MTPA in the ML area of 382.709 ha by M/s Odisha Mining Corporation Ltd. located at villages Sukurangi, Saruabil, and village limits of Ostapal, Kamarda and Talangi, Tehsil Sukinda, District Jajpur, Odisha under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions:

Specific Condition:

- i. The Project Proponent to prepare the conservation and protection plan for Nallah passing through the Mining Lease area.
- ii. The Project Proponent should submit the detail in terms of incorporation of machinery equipped with advance technology and having least carbon emission rate.
- iii. The Project Proponent needs submit the carbon foot prints and carbon sequestration study w.r.t. instant project.
- iv. The Project Proponent shall submit the status of plantation which will ensure carbon sequestration lost due to deforestation and other fossil fuel based activities.
- v. The Project Proponent needs to prepare dump management plan by incorporating the garland drain and dump plantation.
- vi. The Project Proponent needs to submit the detail plan for progressive backfilling in order to reduce the dump accumulation.
- vii. The project proponent needs to submit the total excavation which includes ROM, OB, IB etc during the submission of EC proposal.
- viii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features such as habitations, school, water bodies, road, etc., and their impacts and mitigation.
- ix. The Project Proponent needs to submit the ecology restoration plan for the area to be backfilled and reclaimed by plantation along with re-grassing and an area which will be converted into water reservoir.
- x. The Project Proponent needs to submit the efficacy and operational data of the EMP measures undertaken in the past.
- xi. Being an expansion proposal, the Project Proponent needs to submit the real time data monitored for ambient air quality, noise level, ground vibration, water quality, soil quality at the mine site, predominant downwind direction, nearest village, crusher and at other sensitive receptors. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- xii. The Project Proponent needs to submit the letter from the State Forest Department regarding whether the dumping allowed upon the forest area for which forest clearance has been obtained for non-forestry purposes.
- xiii. The Project Proponent needs to submit authenticated list of flora and fauna as per the latest Wildlife Protection Amendment Act, 2022 and the involvement of National Park, Wildlife Sanctuary, ESA/ESZ within 10km radius of the study area.
- xiv. 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. The Project Proponent also needs to submit the implementation status of the earlier public hearing concerns.
- xv. The Project Proponent needs to undertake the enumeration of the plant species within the mine lease area before cutting them. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.

- xvi. The Project Proponent needs to submit the action plan for carrying out plantation along the 7.5m barrier, safety zone and gap plantation. PP should also submit the details of no of saplings planted and to be planted, type of saplings existing and proposed, existing species wise survival rate and the area covered and to be covered under greenbelt/plantation, density of plantation along with the timeline and budget. The Project proponent also needs to submit the successful rate in compliance to the earlier EC.
- xvii. The Project Proponent needs to submit the certified past production details from the inception of the mine till the time for submission of EC proposal.
- xviii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xix. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xx. The Project Proponent shall prepare the scheme for mandatory recycle/re-use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xxi. The Project Proponent needs to submit the possession certificate for already acquired land and also the timeline for acquiring the remaining land at the time of submission of EC proposal. The Project Proponent also needs to submit the implementation status of R&R and data on socio economic that how the mining activity improved the quantity and quality of the local people.
- xxii. The Project Proponent needs to submit the latest Certified Compliance Report (CCR) by the Ministry's Regional Office as per Ministry's OM dated 08.06.2022at the time of appraisal of EC.
- xxiii. The Project Proponent shall conduct drone survey of the mine lease area which includes the mine pit area, dumping area, plantation and transportation route during the appraisal for EC.
- xxiv. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation

1.5 Surve Larung Lumshnong Limestone Deposit with total excavation capacity of 1366475.2 TPA (654577 TPA of limestone and 711898.2 TPA of waste including topsoil) in ML area of 44.58 Ha by M/s. Green Valliey Industries Limited located at Village Lumshnong, Tehsil Khliehriat, District East Jaintia Hills, State Meghalaya[Online Proposal No. IA/ML/MIN/457835/2024, File No. IA-J-11015/25/2024-IA-II(NCM), EIA Consultant - Perfact Enviro Solutions Pvt. Ltd.] – For Terms of Reference reg.

The proposal is for Terms of Reference (ToR) for Surve Larung Lumshnong Limestone Deposit with total excavation capacity of 1366475.2 TPA (654577 TPA of Limestone and 711898.2 TPA of Waste including Topsoil) in ML area of 44.58 Ha by M/s. Green Valliey Industries Limited located at Village Lumshnong, District East Jainitia Hills, Meghalaya.

2. The details of the project as ascertained from the document 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: 25°11'02.49" N to 25°11' 21.32" N and Longitude: 92° 23' 38.79" E to 92° 24' 23.78" E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 and falls in Seismic Zone-V.
- ii. The project activity listed at schedule no. 1(a) of Mining of Minerals. The instant project attracts General condition due to the presence of Eco-Sensitive Zone of the Narpuh Wildlife Sanctuary at 3.47 km and Narpuh Wildlife Sanctuary at 4.62 km in SE direction in SE to the project site and falls under Category "A" of the schedule of the EIA Notification, 2006.
- iii. Details of Mine Lease in a chronological manner:

S.No.	Prospecting	Date of the	Name of	Period	Granted by	Mine
	License/ Letter of	grant	the Mineral	of		lease
	Intent (Lol)/ Grant		& (Major/	Grant		area
	of Mine lease and		Minor)	- · · ·	.0	in Ha
	Lr No			N		
1	Letter of Intent/	28.09.2022	Limestone		Mining &	44.58
	authorization	C-Pay	ments		Geology	ha.
	order-				Department,	
	MG.75/2022/220				Government	
					of Meghalaya	

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

Private land	Nil
Government land	Nil
Forest land	44.58 ha.

Total Mining lease area (MLA), ha	44.58 ha.
Private land for crusher, workshop & other infrastructure outside the	NA
MLA	

v. Mining plan details:



Mining Plan(approved by	Letter No.	MCDR-MPCP0CaF1/7/2023-
Indian Bureau of Mines/DMG)		GUH-IBM_RO_GUH
	Date	03.10.2023.
	Mineral	Major
	(Major/Minor)	
	Mine Lease	44.58
	Area, Ha	
	Validity	5 years
Mining Parameters	Quantitative Desc	cription
Method of Mining	Opencast mecha	nized mining using HEMM
Drilling/Blasting	Deep hole drilling	& blasting.
Geological Reserves	33.82 million tons	s of Limestone
Mineabl <mark>e Reserv</mark> es	21.36 million ton	of Limestone
Breakup of Total Excavation	1366475.2 TPA (654577 TPA of limestone
(Top <mark>soil/OB/SB/IB/M</mark> ineral	and 711898.2 TI	PA of Overburden/waste including
Rej <mark>ects/Waste, M</mark> TPA)	topsoil).	
Lif <mark>e of mine</mark>	The life of mine	e is estimated at about 34 years
2 7	considering the m	nineable reserv <mark>es</mark> based on present
	exploration.	
Mine Bench Height & Bench	The width of the	b <mark>en</mark> ches in min <mark>er</mark> al will be 9 m for
Width	safe operation of	mining machiner <mark>y.</mark> The height of the
7	bench will be 6 m	ı
No. of Mine Benches	23	
Existing Depth, m bgl	NA, as it is a gree	en field project
Ultimate Depth of Mining, m RL	448	
Ground Water Table, m RL	447.643	<u></u>
Details of groundwater	The water table	will not be intersected as it is at
intersection	447.643 mRL ar	nd mining will be done up to 448
	mRL.	
Individual bench slope	80°	
Overall pit slope	About 34°	
Details of existing/ proposed	No crushing and	screening plant is proposed in the
Crusher	mine.	
Mineral Beneficiation	NA	
RoM output size	-1000 mm	
Transportation details including	The material after	r blasting will be loaded by hydraulic
capacity of dumper/tipper,	excavators of ab	bout 0.90 m ³ bucket capacity into
mode of transport and distance	dumpers/tippers	of 25 tons carrying capacity for its
	transportation to	crusher and waste dump yards.

Generation of Topsoil/OB & its	Max. 711898.2 TPA of overburden/waste including		
Management during plan period	topsoil will be generated in any one year. Waste/OB		
& conceptual period	will be dumped at earmarked places. The topsoil		
	generated will be used extensively for plantation.		
	About 10.04 million tons of waste and 0.10 million		
	tons of soil will be generated upto the life of min		
	Waste will be stacked separately in the temporary		
	dump. The entire waste will be backfilled.		
Generation of Mineral Rejects/	There will be no rejection from the mine.		
Waste & its Management during	C _A		
plan period & conceptual period			

vi. Water requirement:

Total water	R R	Freshwater	40 KLD		
requirement	50 KLD	Treated water	10 KLD		
Source	The total water requirement for the proposed mine will be around				
	50 KLD which will be sourced through water tankers from the				
	company's c <mark>eme</mark>	ent plant.	N N		
Permission	NOC Obtained from Village Council on 16.08.2008				
Additional	The total water r	equirement for the proposed min	ne will be around		
information(if 50 KLD, Out of this, 40 KLD will be sourced from the villages ar					
any)	the rest 10 KLD	will be ETP-treated water.			

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

-Payments

Particulars	Particular's Name	Distance &
		Directions
Village	Lumshnong	1.66 Km - WSW
Town	Khliehriat	18.93 km - NW
Highway	NH-6	0.57 km - SE
Interstate	Meghalaya-Assam State Boundary	11.37 Km SE
Boundary	India-Bangladesh International	
	Boundary	13.13 Km SSW
Railway station	Hilara railway station	33.45 km - SE
Water bodies	 Um Badoh (Ephemeral Nala) 	1.88 Km - WNW
	Um Lunar	2.33 Km - SE
	Kukha Nala	3.56 Km - N
	Khaddum Pieltleng Falls	4.31 Km - SE
	Thangpyrshaid Nala	4.38 Km - NW
	Lukha River	4.49 Km - SE
	Lubha River	4.52 Km - SSE
5	Dongtangle Nala	<mark>4.6</mark> 3 Km - NE
	Um Lutha Drain	5. <mark>0</mark> 3 Km - NW
~	Um Lahe	5. <mark>49</mark> Km - SSE
	Um Sang <mark>at </mark>	5.5 <mark>0</mark> Km - NE
Sakha Nala		5.5 <mark>4</mark> Km - NW
	Seshympa River	7.3 <mark>4</mark> Km - W
	Um Satein	7.9 <mark>1</mark> Km - SW
	Wah Thariang Nala	7.9 <mark>9</mark> Km - N
9	Dongtongle Nala	8.16 Km - NE
	Um Thlu	8.25 Km - NE
A A	Apha Nala	10.52 Km - SE
6.	Um Tharang	11.20 Km - SW
Forest	Narpuh Reserve Forest	8.42 km SW

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected	Yes/No	Details of Certificate/letter issued by the		
Area/Environmental		concerned Department mentioning the Lr no,		
Sensitivity Zone		date of grant, and remarks		
Forest land within the	Yes	The application for Stage-I forest clearance		
mine lease area and (if		has been submitted on the MoEF&CC portal		
yes) status of Forest		vide proposal no.		
Clearance		FP/ML/MIN/QRY/463287/2024 dated		
		24.02.2024		
National Park	No	Not Applicable		
Wildlife Sanctuary	Yes	Narpuh Wildlife Sanctuary - 4.62 km SE		
Eco-Sensitive	Yes	Narpuh Wildlife Sanctuary ESZ - 3.47 km SE		
Zone(ESZ) / Eco-				
Sensitive <mark>Area(</mark> ESA)				
Coastal Regulation	No	Not Applicable		
Zone (<mark>CRZ)</mark>				
Schedule-I species	No	The details will be submitted along with the		
(No. <mark>s and name</mark> of		EIA report.		
sch <mark>edule-I speci</mark> es with				
the authenticated letter)	1			
Wildlife Conservation	No	The conservation plan will be submitted along		
Pl <mark>an</mark>		with the EIA report.		

ix. Green belt/plantation details:

Proposed area for	The mining lease comprised a total of 44.58 ha of land. Out		
gre <mark>en bel</mark> t/plantation	of which, 41.44 ha will be used for mining and 3.14 ha will be		
8	the virgin area under the greenbelt. Out of the total mined-		
	out area, 23.86 ha. will be backfilled and afforested and the		
10 ja	rest 17.58 Ha will be covered by bench afforestation.		
Budget for green plant	Rs. 87,64,740		
& plantation till the end	010		
of life of mine.	en		
No. of tree cuts in the	350 trees will be cut in the mine lease.		
mine lease area and	A total of about 97386 trees will be planted up to the		
compensatory	conceptual period.		
afforestation			
Particulars for Green	Area covered (in Ha)		
belt/plantation			
7.5 m barrier & non-	3.14 Ha.		
mineralized zone			

x. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic			
Study/others			
Period of baseline data collection	Dec 2023 to February 2024		
Season (Summer / Pre-monsoon /	Winter Season		
Post- monsoon / Winter)			

xi. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Project Cost	Rs 30.14 crores
Employment	94

3. Observation and Recommendation of the Committee:

The instant proposal is for Terms of Reference for Surve Larung Lumshnong Limestone. The Project attracts General condition due to the presence of Eco-Sensitive Zone of Narpuh Wildlife Sanctuary located at 3.47 km from the project site and falls under Category "A" of the schedule of the EIA Notification, 2006.

The EAC observed that the mine lease area falls near to Wildlife Sanctuary and located in the vicinity of Seismic Zone-V which requires special attention in order to protect local species, habitats during the mining. The EAC noted that the data collected during the month of December 2023 to February, 2024 needs to be relooked by the PP, the EAC was of the opinion that the baseline data collected during the aforesaid period doesn't take into account the hibernation period of the wildlife species prevalent in the mine lease area and its surroundings. The EAC opined that a comprehensive baseline data (at least 15 days) including the impact of mining caused on the local habitat and species should be collected by the PP.

Thereafter, the EAC enquired about the sourcing of water, PP replied that they will be sourcing their fresh water requirement of about 40 KLD for the instant mine from their cement plant which is located at distance of 13.33 km approx. PP informed that a water spring is located adjacent to their cement plant and they have obtained the NoC from the Gram Panchayat to source water from there for use in their proposed mine. EAC opined that presence of spring water establishes the fact that ground water table is not located at much depth. EAC stated that these activities will require movement of large number of water tankers to and fro from the mine lease area causing the rise in emission and traffic. The EAC enquired the ground water level of the mine lease area, PP informed that ground water is located at 447.643 mRL and the water table will not be intersected during the entire period of mining. The EAC advised the PP to provide the ground water level data for pre monsoon and post monsoon period. EAC also asked the PP to submit the impact of mining on the rivers near the mining lease area i.e. Lubha and Luka river.

From the KML presented during the meeting, EAC observed that the lease area is not far away from the ESZ of Narpuh Wildlife Sanctuary and has pristine green belt coverage. Accordingly, the EAC asked the PP about the movement of wildlife within the lease area and its surroundings. PP informed that the lease area is not a part of any wildlife corridor. However, EAC was of the opinion that there must be some movement of wildlife owing to its location and pristine nature. EAC advised the PP to conduct a study with regard to the movement of wildlife within and surrounding of mine lease area.

While discussing the transportation route from the mine lease area to the national highway 6, PP informed that they will construct a haul road of 2.3 km length to connect the mine lease area with the national highway. EAC was of the opinion that PP may explore the feasibility of laying a over belt conveyer upto the highway instead of cutting trees and making a haul road to ensure barrier free movement of wildlife. PP informed that they will explore the feasibility of the same.

The EAC further noted that PP has not proposed the use of crusher within the mine lease area. PP informed that they will be directly transporting the mined out mineral to their cement plant where they have already established a crusher. EAC was of the opinion that the PP should include the provision of installing one mobile crusher within the lease area, so that the mined ore is crushed before transportation through OLBC to the nearest highway (NH 6).

During the discussions, EAC pointed out that waste generation is more than the actual Mineral being generated and accordingly asked the PP to compute the cost-benefit analysis keeping in mind the waste generation from the mining.

In view of the above discussions, the EAC concluded that the mine lease area is located in the vicinity of the ecologically sensitive and fragile area. Thus, the EAC opined that it is necessary to ascertain the ground reality on the proposed methodology of mining, habitation, afforestation, transportation, situation of ground water and existing spring water and nearby river. 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.

Based on the above observation, the EAC **deferred** the proposal and asked to submit the requisite information:

The Project Proponent needs to submit the comprehensive baseline data (15 days) considering the impacts of mining upon local habitat and species. PP shall also submit the comparison of the existing baseline data of the industries located within 10 km periphery of the mine lease area.

- ii. PP needs to submit the NOC from Ministry of Defence.
- iii. PP shall explore the feasibility of laying a over belt conveyer upto the highway instead of cutting trees and making a haul road to ensure barrier free movement of wildlife.
- iv. PP shall explore the feasibility of incorporating a mobile crusher within the mine lease area for crushing the mineral before transportation.
- v. The Project Proponent needs to submit the NoC from the Gram Panchayat for withdrawal of water from existing spring water source.
- vi. The Project Proponent needs to submit the pre and post monsoon level of ground water.
- vii. The Project Proponent needs to compute the cost-benefit analysis w.r.t. generation of more waste than minerals and also conduct the scientific study for managing the dump within the ML area.
- viii. PP shall conduct a study and submit the report with regard to the movement of wildlife within and surrounding of mine lease area.
- ix. The project proponent should submit the compliance of the site visit to be conducted by a sub- committee comprising of EAC members and officers from the Ministry.

1.6 Laserda - Pacheri Manganese and Iron Ore mining with production capacity of 1.545 MTPA (ROM) of Iron Ore, 1.182 MTPA of waste (Total Excavation of Iron Ore 2.728 MTPA) and 0.110 MTPA (ROM) of Manganese Ore, 0.355 MTPA of waste (Total Excavation of Manganese Ore 0.465 MTPA) along with Dry screening and crushing using 200 TPH x 2 Primary Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen in the ML area of 131.800 ha by M/s Thriveni Earthmovers Private Limited located at Villages Dhanurjaypur, Kanarda and Laserda, Tehsil Barbil, District Keonjhar, Odisha - [Online Proposal No. IA/OR/MIN/446058/2023, File No. IA-J-11015/113/2021-IA-II(NCM), EIA Consultant - M/s Creative Engineers and Consultants] - Reconsideration for Environmental Clearance reg.

The instant proposal is for Environmental Clearance for Laserda - Pacheri Manganese and Iron Ore mining with production capacity of 1.545 MTPA (ROM) of Iron Ore, 1.182 MTPA of waste (Total Excavation of Iron Ore 2.728 MTPA) and 0.110 MTPA (ROM) of Manganese ore, 0.355 MTPA of waste (Total Excavation of Manganese Ore 0.465 MTPA) along with Dry screening and crushing using 200 TPH x 2 Primary Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen in the ML area of 131.800 ha by M/s Thriveni Earthmovers Private Limited located at Villages Dhanurjaypur, Kanarda and Laserda, Tehsil Barbil, District Keonjhar, Odisha.

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

- i. The instant project activity is listed at schedule no. 1(a) Mining of Minerals and attracts the general conditions as the Odisha Jharkhand Interstate Boundary is located at a distance of 3.19 km from the mine lease area and falls under Category 'A'.
- ii. The mine lease area is located between Latitude 22°03'16.60991"N to 22°04'19.18502"N and Longitude 85°17'53.81761" to 85°19'15.99748" E. The mine lease area falls under the Survey of India Toposheet No: F 45H8(73F/8) and falls in Seismic Zone-II.

Date of	Proposal No & File No	Consideration	Details of ToR	Date of
applicati <mark>on</mark>		by EAC		accord
10.12. <mark>2021</mark>	IA/OR/MIN/44	28-29 Dec,	ToR was issued	28.03.2022
	6058/2023 & J-	2021 & 7-9	to M/s Thriveni	
	11015/113/20 21-IA-	Mar, 2022	Earthmovers	
× ×	II(NCM)		Private Limited	
\sim			for underta <mark>ki</mark> ng	D
			detailed	S
			EIA/EMP study	S
			along with	
			recommendation	
			made by NEERI	

iii. Details of Terms of Reference (ToR):

iv. Details of Mine Lease in chronological manner:

S.N	Prospecting	Date of the	Name of	Period of	Grante	Mine
0	License/ Letter of	grant	the Mineral	Grant	d by	lease
	Intent (LoI)/ Grant of		& (Major/		2	area in
	Mine lease and Lr		Minor)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		На
	No			e ^X		
1	Letter of Intent for	27.01.201	and at S	1 year	Govt.	256.30
	grant of Composite	7 7	menus	from the	of	4
	License No. IV (date of its	Odisha	
	MISC)SM06/201784			issuance		
	8					
	/SM, Bhubaneswar					
2	Composite License	19.01.201	Manganes	24.01.201	Govt.	256.30
	vide LrNo.IV (B)SM-	9	е	9 to	of	4
	100/2007-43			23.01.202	Odisha	
	3/ SM,			1		

3	Letter of Intent for	21.09.202	Manganes	50 years	Govt.	131.88
	grant of mining lease	1	e and Iron		of	9
	vide No.7731-I				Odisha	
	V(B)SM-					
	100/2017/SM and					
	Lol valid for a period					
	of 3 years from the					
	date of its issuance					
4	Revised Lease and	22.01.202	Manganes	50 years	Govt.	131.80
	authenticated DGPS	1	e and Iron		of	0
	Survey map vide Lr	$\mathcal{L}^{\mathcal{L}}$		Can	Odisha	
	No. MXIII (b)					
	80/ <mark>2015/8</mark> 031/DM/					
	stating that after	I	1			
	conduct of DGPS	RI	V F			
	survey by ORSAC	\sim	2-0 0			
	the area now comes	1 29:2	CULL BY			
	to 131.800 hects	500				
	instead of 131.889				E	
	hects				U U	2

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

Private land	35.765
Government land	1.684
Breakup of	forest land of 94.351 Ha
Rev <mark>enue fo</mark> rest	53.467 Ha
Non forest land recorded as forest	40.884 Ha
as on 2 <mark>5.10.1980</mark>	C GREEN S
Total Fo <mark>rest land</mark>	94.351
Total Minin <mark>g lease area (ML</mark> A), ha	131.800
Additional information (if any)	Project Proponent submitted that the mine lease
e-1	involves Revenue and Sabik forest
	predominantly characterized with scattered
	growth of Sal, Mahua, Kendu etc. which is a
	tropically dry deciduous open forest. The non-
	forest land consists of agriculture & non-
	agriculture land as per revenue record. Project
	Proponent also submitted the letter from the
	Office of the Tahasildar, Barbil vide No. 4213/
	dated 22.11.2021 showing the status of land

schedule of non-forest land as on 25.10.1980
over 131.800 ha.
In-principle approval under Section-2 of the
Forest (Conservation) Act, 1980 has been
granted by MoEF&CC (Forest Conservation
Division) vide Lr. No.8-02/2023-FC dated
21.12.2023 for the use of the entire forest land of
94.35 <mark>1</mark> Ha.

vi. Details of Mining plan:

Mining Plan including	Letter No.	MP/A/14-ORI/BHU/2021-22			
Progressive Mine	Date	18.11.2021			
by Indian Bureau of	Mineral & (Major/Minor)	Manganese & Iron Ore			
Mines/Divig)	Mine Lease Area, Ha	131.800			
ž – Š	Validity	5 years from the date of lease deed execution			
Mi <mark>ning Paramet</mark> ers	Quantitative Description				
Method of Mining	Fully Mechanized (I drilling and blasting	-M) Opencast mining method with			
Dr <mark>illing/Blasting</mark>	Wet Drilling and Cont	rolled Blasting			
Geological Reserves	Iron – 8.368 Mil. Tonnes				
	Manganese – 7.368 M	Mil. Tonnes			
Min <mark>eable Reserve</mark> s	Iron – 6.226 Mil. Tonnes				
2	Manganese – 6.470 M	/iil. Tonnes			
3	It will be further increa	ase after exploration in future.			
Breakup of Total	Iron – 2.728 Mil.T, (I	ROM -1.545 MTPA + Waste – 1.183			
Excavation	MTPA)				
(Topsoil/OB/SB/IB/Miner		18			
al Rejects/ Waste, MTPA)	Manganese – 0.465 M 0.355 MTPA)	Mil.Ts (ROM - 0.110 MTPA + Waste –			
Life of mine	62 vears				
	Life of mine may like	ly to be changed in future depending			
	upon the future chang	es in cut-off grade, method of working,			
	future resources and	market demand.			
Mine Bench Height &	Iron - Height -10m, V	Vidth-will be equal and more than the			
Bench Width	height				
	Mn - Height -5m, W	idth-will be equal and more than the			
	height				
No. of Mine Benches	Will be maintained as	per the mining plan			

Minutes of 29th EAC (NCM) during 9-10th May, 2024

Existing Depth, m bgl						
Ultimate Depth of	392m RL					
Mining, m bgl						
Ground Water Table, m	490m RL					
bgl						
Details of ground water	The groundwater tabl	e lies at a c	lepth of 490mRL	. Ultimate		
intersection	depth of mining will	be 392m	RL. Hence gro	oundwater		
	intersection is envisaged.					
Individual bench slope	80°					
Overall pit slope	37.5°					
Details of existing/	Dry screening and c	rushing usi	ng 200 TPH x	2 Primary		
proposed Crusher	Crushing, 200 TPH x	2 Seconda	ry Crushing, 200) TPH x 2		
	Tertiary Crushing, 25	0 TPH x 2	Vibrating Screen	n and 150		
	TPH x 1 Vibrating Screen					
Mineral Beneficiation	Dry screening and crushing using 200 TPH x 2 Primary					
	Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2					
	Tertiary Crushing, 25	0 TPH x 2	Vibrating Screen	n and 150		
	TPH x 1 Vibrating Sci	reen				
RoM output size	Iron: 5-18mm, Fines	5mm, -1	10mm, 1 <mark>0-</mark> 30mn	n, Lumps-		
	+30mm			ů l		
	Manganese: Lumps:	+30mm,10-	30mm			
I ransportation details	Iron and Manganese	ore from the	e mines will be tr	ansported		
including capacity of	to Barbil and Bolani F	Railway Sidi	ng through Bola	ni-Kiriburu		
dumper/tipper, mode of	PVVD road. The railwa	y sidings of	Bolani & Barbil a	re located		
transport and distance	at a distance of 5.6kh	n and 12.0 k	(by road) resp	pectively.		
Generation of January 100	THE THE STR	Plan	Conceptual	Total		
Topsoli/OB & Its	Waste Management	Period	Period	(Mil.cum)		
Management during plan	C GRE	(Mil.cum)	(Mil.cum)	,		
period & conceptual	Road Maintenance	0.353	4.546	4.899		
penod	Dumping	0.789	4.201	4.990		
	Backfilled in mine		13 983	13 983		
	<pre>C void ymen</pre>	ts 🔪	10.000	10.000		
	Total	1.142	22.730	23.872		

Generation of Mineral	Mineral	Plan Period	Concept	ual	Waste			
Rejects/ Waste & its	Reject	(Mil.T)	Period (I	Mil.T)	Management			
Management during plan	Iron Ore	0.995	3.575		Sold Directly			
period & conceptual period	Manganese Ore 0.184		4.714	4.714 or Blend with Hi Grade				
	Total	1.179	8.289					
	The mineral	reject will b	e stacked	d in 3	3 places. The			
	temporary mineral reject stack – 1 is for manganese ore.							
	The temporary	mineral reje	ct stack -	2 & 3	is for iron ore.			
	and minoral re	mineral reje	CL SLACK I	& Z IS	on virgin area			
	refilled and rec	plaimed area	of Lasorda	ine iop noit ₋ 1	of the alleady			
	Stack ID			Total	Stack			
	Olack ID		ím)	Quant	tity (m ³)			
	Temporary	MR Stack 1	10	73754	1			
S (A	Yard – 1							
2	Temporary	MR Stack 3	30	26009)1			
		MP Stock 1	15	05465				
	Yard – 3	VIN STACK	15	95400				
Additional information(if	The Project	Proponent s	ubmitted	the le	etter from the			
an <mark>y</mark>)	Directorate of	Mines, Odish	a vide Lr I	No. MX	(III (b) 36/2021			
	1197/DM, dat	ed 09.02.202	22 stating	that t	the concerned			
	Mining Officer	along with t	the Jr. Mi	ining C	Officer of Joint			
i i i i i i i i i i i i i i i i i i i	Director of Min	es, Joda have	e enquired	the ma	atter in the field			
3.	on 28.12.2021	& 29.12.2021	1 and it wa	is obse	erved that there			
	are old excava	tions of low de	epth in 45 i	nos of I	patches of land			
10	covering 2.49	1 ha (appro	oximately)	prese	ent inside the			
	applied ML a	rea of Lasar	rda-Pache	ri Mar	nganese& Iron			
	Block over a	in area of	131.800	ha of	M/s Thriveni			
	Earthmovers I	Private Limite	d. Those	excava	ated areas are			
	filled with thick	vegetation g	growth, as	It is ev	lident from the			
	surface map	attached duri	ng auction	1 OF La	asarda-Pacheri			
		IIUII DIUCK IO			nse mat many			
	composito lio	anys wele	ofore the	arant	of composite			
	license to M/e	Thriveni Farth	nmovere P	yranı Privato I	limited As ner			
	the report sub	mitted .Ir Mir	ning Office	er of .le	pint Director of			
	Mines, Joda t	here is no ille	egal minin	g carri	ed out by M/s			

Thriveni Earthmovers Private Limited within the lease hold
area.

vii. Water requirement:

Total water requirement		83 KLD	F	Fresh water 911 KLD		
		Treated wa			ater	72 KLD
Source	E	Borewell – 95 KLD, Mine Pit Water – 888 KLD			88 KLD	
Permission for withdrawal	/ N	lo Objection C	Ce	rtificate fo	or Groundwa	ter Abstraction
intersection along with details	s fi	rom CGWA vi	ide	e NOC N	o. CGWA/N	OC/MIN/ORIG/
of grant and its validity		2024/19982 dat	teo	d 06.03.20)24.	
Additional information (if any) E	ptimized.	A	Recomme	endation, the	quantity will be
viii. Nearestvillage/ town/ highway/ interstate boundary/ railway station/ water bodies/monument/ forest						
Particulars	Pa	rticular's Name	е	7	Distance &	Directions
Village	La	serda		20	<300m	
Town	Ba	rbil	١.	0	5.7Km, NE	
Highway	NH	1-520		19 N	4.8Km, E	
	S⊦	I-10B		100	6.8Km, E	
	S⊦	1-4			8.4Km, N	D I
In <mark>terstate Boun</mark> dary	Odisha-Jharkhand				3.19Km	S
	Interstate Boundary					
Railway Station/Railway	Ba	rbil			6.3Km, NE	
line	ξN			18		
Wa <mark>ter Bodies</mark>	Karo River		50	 Passes th 	rough lease	
	• 5	 Seasonal Stream 		 Within lease area 		
<u>`</u> 2	• (Ganse Nala		• 1.4Km, SE		
E I	• 1	opadihi Nala		EN	• 5.1Km, S	S. L
Forest	• l	Jliburu RF	F		• 0.2Km, SI	É
10 A	• *	Karo RF			• <1Km, NV	V
-e	• 5	Siddhamath RF			• 1.4Km, SI	E
	• L	akrhaghat RF			• 1.8Km, S	
	• k	Karampada RF		ts 🔪	• 3.4Km. W	,
	• 7	hakurani RF			• 7.4Km.E	
ix. Presenceof Environme	ntal	ly Sensitive are	ea	is in the st	udy area	
Forest Land/ Protected Are	ea/	Yes/No		Details of	f Certificate/	letter issued by
Environmental Sensitivity Zor	ne			the o	concerned	Department
				mentionir	ng the Lr no	, date of grant

and remarks

Forest Land within the mine	Yes	The Project Proponent submitted
lease area and (if yes) status of		that an area of 94.351 Ha is a forest
Forest Clearance		land.
	RIV	The Project Proponent submitted the in principal approved granted by the Ministry vide Lr. No: 8-02/2023-FC dated 21.12.2023 under Section - 2 of the Forest (Conservation) Act, 1980 in favour of M/s Thriveni Earthmovers Private Limited for non- forestry use of 94.351 ha of forest land including 4.261ha of safety zone (3.858 ha along the ML boundary and 0.403 ha along the PWD road) within the granted LoI for ML over 131.800 ha for Laserda Pacheri Manganese &
	C. T	Iron Ore Block in Keonjhar District of
× 3		Odisha.
National Park	No	Project Proponent reported that there
Wildlife Sanctuary	No	are no National Park, Wildlife Sanctuary, Tiger/Elephant Reserve, Biosphere Reserve, Ramsar site within 10 km radius of the study area.
Eco-Sensitive Zone(ESZ) /Eco-	Nil	- AP
Sensitive Area (ESA)	Drects if Sh	1 ⁵ ///
Elephant/Tiger Reserve	No	Karo Karampada – 2.31 km. The Project Proponent has submitted the map authenticated by Divisional Forest Officer, Keonjhar Division.
Coastal Regulation Zone (CRZ)	No	łc
Schedule-I species (No.s and	Yes	Authenticated list of Flora and Fauna
name of schedule-I species with		is obtained from Divisional Forest
authenticated letter)		Officer, Keonjhar vide Letter No. 2044 dated 05 03 2024
Wildlife Conservation Plan	Yes	Wildlife Conservation Plan approved by PCCF(WL) & CWLW, Odisha vide letter no. 10007/ CWLW-FDWC-FD- 0024-2022 dated 11.09.2023 with a financial outlay of Rs. 390.402 Lakhs.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	1	The Project saplings ov boundary an expected si Lakhs. In the post (96.57% of vegetation. out area, infrastructur	Provention Provention Plan Plan wa re an	oponent has pr in area of 2.923 i0 m of road saf val rate of 75% ning stage, ove total lease a ntation will be ca ste dumps, r rea, unused and	oposed 3 ha alc ety zone 6 with a erall an rea) wi arried ou nineral d safety	to plant 2923 no. of ong the Mining Lease e in Laserda side with a budget of Rs 5.84 n area of 127.29 Ha Il be covered under ut in places like mined storage, reclaimed zone area etc.	
Budget for green pla plantation till the en life of mine.	ant & Id of	Rs.5.84 Lak	Rs.5.84 Lakhs				
No. of tree cuts in th mine lease area and compensatory afforestation	e	Towards sc 91Ha of equ land, a total the land val	Towards scheme of compensatory afforestation, an area of 91Ha of equal non-forest land and 104Ha of degraded forest land, a total demand of Rs. 5.92 Crores has been raised with the land value of Rs.2.38 Crores additional.				
Particulars for G	reen	Area covere	ed (i	n Ha)			
7.5 m barrier & mineralized zone	2.923 Ha in Mine Boundary and 50m safety zone for road.						
xi. Baselinedetail:							
Baseline Data (Air / Period of baseline data collection Season (Summer / Pre-monsoon / Post-monsoon / Winter)	r / Noise / So ch, 2021 to M mer	<u>il / F</u> lay,	1ydro geologica 2021	l study/	Traffic Study/ others)		
Predominant Wind direction (From)	SW	& W	: (REEN		S.	
Ambient Air	Loc	ations Parameters Results			ts		
Quality (no. of locations) and	6	10		/10 /2 5	38.2 -	38.2 – 78.6 µg/m3	
results			SC)2	42-	13.5 µg/m3	
			NC)x	9.6 -	19.2 µg/m3	
Noise level (no. of	Loc	ations		Parameters		Results	
locations) and		10		Day Eq Leq di	B(A)	44.9 - 52.8	
results		10		Night Eq Leq	dB(A)	37.2 – 43.2	
Water Quality (no.	Surfa	ace Water Qu	Jalit	У			
of locations) and	Loc	ations		Parameters		Results	
results		04		pH		1.12 - 1.96	
				TUS (mg/l)		136 - 148	
				Fluoride (mg/l))	0.12 - 0.2	
	1			Unioriae (mg/l)	20 – 32	

		Fe (mg/l)	0.4 - 0.48
		Dissolved Oxygen (mg/l)	5.6 - 6.1
		Biochemical Oxygen Demand (mg/l)	2.4 – 2.8
	Ground Water Qualit	y	
	Locations	Parameters	Results
	8	pH	7.68 - 8.2
		TDS (mg/l)	282-346
		Fluoride (mg/l)	0.19 – 0.22
	JVL	Chloride (mg/l)	32-38
	0.1	Sulphates (mg/l)	7.8 – 9.8
		Iron (mg/l)	0.27 – 0.31
Soil Quality (no. of	Locations	Parameters	Results
locations) and	9	рН	5.6 - 6.5
results	L R I	Electrical Conductivity	1.86 - 2.1
		Nitrate %	0.048 - 0.061
	5 A.V.	Phosphorous %	0.016 - 0.022
	2 0	Potassium %	0.066 - 0.074
study and results	groundwater condition groundwater modelin Ore Block of M/s. The Nallathambi Varada Professional). Pump well in the core zone various methods, the is in conformity with aquifer. The parame the lithology and an deeper confined aqui - Pacheri Manganese to an extend of 1348 Existing one bore we and estimated pump more bore wells will demand of 380 m hydrogeological con withdrawal of ground draw down and more	ons in both core and to ng for Laserda-Pacheri Mariveni Earthmovers Pvt. Lta rajan (CGWA Accredite ing test was conducted in the Based on the pumping average K value obtained h regional aquifer paran- ters for deeper bore wells estimated value of 0.3318 fers. The proposed mining and Iron ore block require a m3/day for safe mining. Il will pump for 6 to 8 hour ing is 100 to 120 m3/day I supplement the ultimat 3/day in the project area a induced recharge from Ka	buffer zones with Manganese & Iron d.' prepared by Dr. d Ground Water n an existing bore test analysis with is 3.318m/d which neters of shallow are inferred from m.day is used for activity at Laserda es mine dewatering rs with 5 HP motor d. The proposed 3 e domestic water ea.The prevailing frawdown for the will have localised aro river.
Traffic study (no. of locations) and results	Project Proponent re mines will be transp through Bolani-Kirib strengthened earlier f at present there is no operating in the nea	ported that Iron and Manga orted to Barbil and Bola uru PWD road which i for the meant of transportation such mineral transportation rby areas apart from SAII	anese ore from the ni Railway Siding s 9m width and tion of minerals but on as no mines are Bolani and SAIL

		Kiriburu which has own railway sidings inside their lease area. Near Bolani railway siding the road is touching to the Bolani main
		road (11m width) which is further connected to Barbil siding
		Rariamda Barbil Bhadracabi SH 10P Eurthar SH 10P island to
		NH 520 (1 long) at Bhadracahi
		NET-DZU (4 Idlie) di Dilduidsalli.
		The nearby railway sidings are Bolani & Barbil which are at a
		distance of 5.6 km and 12.0 Km (by road) respectively.While
		passing through Kiriburu Bolani Road, there is a bridge over Karo
		River with dimensions of around 60m length and 7m width and
		has the strength to sustain loaded trucks/dumpers. Trucks/Volvos
		of the local villagers usually pass through the bridge to move
		towards kiriburu or Barbil. Project Proponent will construct a
		bridge over river Karo having dimension of 60m length and 11m
		width. Permission has been obtained from PWD Department vide
		Letter No.5484 dated 13.07.2023. Bridge construction will start
		after obtaining EC and execution of lease deed. It is observed that
		13 trips/hr for Iron ore and 1 Trip per hour for Manganese ore will
		be dispatched which is a maximum of 14 Trips/Hr. The road will
		continue to be in LOS 'A".
vii	Public Hearing	r (PH) Detaile:

Advertisement for PH with date (name of	30.05.2023 (Odisha), 04.06.2023				
m <mark>ajor national</mark> daily and one regional	(Jharkhand), Regional Newspaper - The				
ve <mark>rnacular daily</mark> newspaper)	Sambad (Odisha), The Prabhatkhabar				
	(Jharkhand), English Newspaper - The				
気	Times of India (Odisha), The Hindustan				
	Times (Jharkhand)				
Date of PH	04.07.2023				
Venue	Mouza-Dhanurjaypur (Khata No.122, Plot				
3 Cp -	No.4/1238)				
Chaired by	Additional District Magistrate (Revenue),				
84	Keonjhar				
Main issues raised during PH	Majority of the comments were related to				
	employment to the locals, proper				
e-Pavn	compensation for PAFs, Infrastructural				
	developments, educational facilities, etc.				
Budget proposed for addressing issues	Rs 9.63 Cr				
raised during PH over 3 years					

xiii. Rehabilitation & Resettlement (R&R):

R & R	The Project Proponent reported that an area of 42.242 Ha of land needs to
details	acquired. About 25 houses need to be shifted as per the 'Right to Fair
	Compensation and Transparency in Land Acquisition, Rehabilitation and
	Resettlement Act, 2013' and 'the Odisha Right to Fair Compensation and

	Transparency in Land Acquisition, Rehabilitation a	and Resettlement Rules,					
	2016'. The State Government has granted administr	ative approval under rule					
	(3) of Odisha Right to Fair Compensation and Transparency in Land						
	Acquisition, Rehabilitation and Resettlement Rul	es 2016 (RFCTLAR&R					
	Rules 2016) for land acquisition and leasing out the land for mining purpo till the validity of the lease.						
Land acquisition process by the State Government for handing over the							
	to proponent is under progress. However, in line with	th the guidelines given in					
	the above rules, project proponent has worked out	t compensation package					
	and a comprehensive R & R study was undertake	en by Asian Institute for					
	Sustainable Development (AISD), Ranchi, Jharkhar	nd.					
	Rehabilitation Cost	Rs.39.05 Crores					
	Periphery Development Cost	As decided and					
		determined by the					
		RPDAC					
	Support Cost for R&R Implementation	10% of the total					
	(Implementation charges; Administration,	budget (a+b)					
	Management, Monitoring etc.						
	Further, the Project Proponent submitted that for eff	ective implementation of					
	R & R plan as well as the Peripheral Development	Plan, Project Proponent					
	will constitute a Rehabilitation & Resettlement Cell (I	R & R C <mark>el</mark> l) for the project					
	and Corporate Social Responsibility Cell (CSRC	C). R & R Cell will be					
	responsible for the effective implementation of R	& R entitlements while					
	CSRC will take the responsibility of peripheral deve	lopment. Both will assist					
	RPDAC in monitoring and evaluation.						

xiv. Courtcase details:

Court Case, No and its present	Project Proponent informed that there is no
status	litigation pending against the project.
Undertaking by Project Proponent	Submitted
w.r.t court case	

xv. Affidavit/Undertaking details:

Affidavit as per	The Project Proponent submitted the Affidavit in a Non-judicial
Ministry's OM	stamp paper of Rs. 50 bearing no. D 087496 dated 20.12.2021 to
dated 30.05.2018	comply with all the statutory requirement & judgment of Hon'ble
	Supreme Court dated 2nd August 2017 in writ Petition (Civil) No.
	114 of 2014 in the matter of common cause versus Union of India
	& Ors.
Undertaking by	The Project Proponent submitted a declaration stating that they
Project Proponent	have entrusted the EIA study to M/s. Creative Engineers &
in EIA/EMP report	Consultants (CEC), Chennai who have been accredited by the
	National Accreditation Board for Education & Training (NABET),

	Quality Council of India. The Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) have been prepared as per the generic structure proposed in the EIA notification 2006, ToR issued by MoEF&CC. The prescribed ToR along with compliance is also incorporated in the EIA/EMP Report. This report is prepared based on the information and data obtained from the Mining Plan and technical studies undertaken by various consultants/institutes that have been engaged. The data given in the EIA/EMP report are factually correct to the best of knowledge.
Undertaking by	The EIA Consultant submitted an undertaking stating that M/s
Consultant in	Thriveni Earthmovers Pvt. Ltd. obtained ToR under EIA
EIA/EMP report	Notification 2006 from MoEF&CC ToR Lr.No: J-11015/113/2021-
k/γ γγγ	IA II(NCM) dated 28.03.2022 for Laserda-Pacheri Manganese and Iron Ore Block for the peak production capacity of 1.545 MTPA (ROM) of Iron ore and 0.11 MTPA (ROM) of Manganese ore over an area of 131.800Ha in Dhanurjaypur, Kanarda and Laserda villages, Barbil Tehsil in Keonjhar District in Odisha. The prescribed TOR is complied with and incorporated in the EIA Report. The requirements regarding compliance of ToR has been explained to the project proponent. The present application is being submitted based on directions of the proponent. This report is based on the information and data obtained from approved Mining Plan, site visit & field study carried out by specialized agencies/ experts. The data generated and given in the EIA/EMP Report are factually correct. The sample collection and analyses are carried out by M/s Star Analytical Services, who are an MoEF&CC recognized and NABL accredited Laboratory.
Plagiarism	The EIA Consultant submitted that the EIA Coordinator (EC) has
Certificate	gone through the report, and the consultant organization shall be
	fully accountable for any misleading information. It is certified that
	no unethical practices, plagiarism involved in carrying out the work
	and external data/ text has not beenused without proper
	acknowledgement while preparing this EIA report.

xvi. ADS details: Earlier, the proposal was considered in the 26th EAC (Non-Coal Mining) meeting held during 31st January & 1st February, 2024 wherein the Committee has deferred the proposal for submission of additional information. The Project Proponent has submitted their reply vide letter dated 11.03.2024 as mentioned below:

S.	ADS Point	Reply by Project Proponent				
No						
1	The EAC opined that the	Project Elephant Division of the Ministry has given				
	Ministry may seek	the following Comments:				
	comments from the Project					
	Elephant Division in the	i. As per the authentication of the DFO,				
	Ministry in this regard.	Keonjhar the nearest elephant corridor i.e.				
		Karo-Karampada is at a distance of 2.31 km				
		from the project site, the user agency and the				
		State Forest Department must undertake				
	-K10	measures for the conservation and				
		protection of elephants and their habitats and				
		ensure to avoid the human-elephant conflict.				
		ii. Considering the migratory nature of the				
		elephants, the user agency should take				
		utmost care for prevention of failing of wildlife				
	S 2 4	including the elephants into the mining pits				
	5 7 97	that the movement of elephants in the				
		alaphant corridor/ alaphant habitat is not				
		affected by the operations of the project				
		iii Also while drafting the Integrated Regional				
	7	Wildlife Conservation Plan the elephant				
	3	conservation and management plan should				
		be made part of the same.				
		iv. Considering the conservation of elephants in				
		the landscape and future perspective also,				
	101.	the Oversight Committee should regularly				
		monitor and review the compliance of the				
		conditions stipulated in the approval for				
		above mentioned mines.				
	е.	v. A proposed Bio-diversity Conservation Plan				
		for this entirel andscape shall also be				
		the cost of upor accord by including the				
		elephant conservation plan				
		vi While consideration of the Environment				
		Clearance, the above comments of the				
		Project Elephant and the compliance of the				
		conditions mentioned in the office				
		memorandum dated 21.12.2023of Forest				

	e-KYC S	 Conservation Division shall also be considered for the instant proposal and also for the other similar proposals related to the mining in that elephant landscape. Further, Ministry (Project Elephant Division)received the following comments from Chief Wildlife Warden, Odisha upon the ongoing court case matter related to the project: One elephant corridor (Karo-Karampada which one out of 14 elephant corridors of Odisha) is falling within 10 Km of impact zone of the said lease boundary. Wildlife Society of Odisha, a NGO has filed O.A. no. 129/2016/EZ before Hon'ble NGT, Kolkata bench praying for notification of the said corridor as Eco-Sensitive Zone under EPA, 1986.
	Mannes C	 iii. Hon'ble NGT, Kolkata in their order dated 06.04.2023 have directed the state respondents to notify the elephant corridor in one-month time. iv. State Government have filled W.P. (C) no. 1407 of 2023 before Hon'ble High Court of Odisha against order dated 06.04.2023 of Hon'ble NGT. v. Hon'ble High Court of Odisha in its order dated 04.05.2023 in the said W.P. have stayed further proceedings arising out of O.A. no. 129/2016/EZ.
	Ce e	As per the Chief Conservator of Forests (Wildlife- II), State Wildlife Headquarters, Odisha information the matter is sub-judice and still pending before the Hon'ble High Court of Odisha.
2	The Project Proponent needs to submit a letter from the State Forest Dept., w.r.t Karo Karampada Elephant Corridor and also the present status of the court	In this regard, the State Forest Dept. has furnished the letter w.r.t. status of the court cases of Karo- Karampada Corridor.

Minutes of 29th EAC (NCM) during 9-10th May, 2024

	case w.r.t Karo Karampada Elephant Corridor in WP (C) No. 14057/2023, 14706/2022 before Hon'ble High Court of Orrisa and O.A No:129/2016/EZ & Executive application no.	
	NGT, Case no: 115/2013 before Judicial Magistrate of First Class (JMFC) Court, Barbil, Orissa and any court of law.	CAR
3	The EAC noted that there is no reference from the Project Proponent regarding list of flora and fauna authenticated by the State Forest Dept. The EAC asked the Project Proponent to submit the authenticated list of Flora and Fauna as per latest Wildlife (Protection) Amendment Act 2022.	Flora and fauna list has been duly authenticated by DFO, Keonjhar vide Lr.No.2044 dated 05.03.2024.
4	The Project Proponent needs to define the exact quantity w.r.t Suggested Ore Transport Mode (SOTM) as per the Recommendation of CSIRNEERI Report on "Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State.	As per the SOTM recommended by CSIR-NEERI, project proponent informed that proposal comes under SOTM 3 i.e. EC capacity between 1 MTPA &<3 MTPA. So, project proponent will dispatch minimum 70% (Max. 1.081 MTPA) by public railway siding and maximum 30% (Max. 0.464MTPA) by road – direct destination or by other public railway siding or above options.

5	The	Projec	t Propo	onent	Project Proponent have obtained No Objection				
	needs	to sub	mit the cu	rrent	Certificate	for	Groundwat	er Abstrac	tion from
	status	of of	NOC	for	CGWA		vide	NOC	No.
	abstra	action of	f ground v	vater	CGWA/NO	C/MI	N/ORIG/202	4/19982	dated
					06.03.2024	. As	per the	Recommen	dation of
					CGWA, the	quar	ntity will be a	optimized.	

Activities	Capital cost	Recurring cost
VC.	(Crores)	(Lakhs/annum)
e-Kie		
Mobile Water Sprinkling	60.0	7.20
Fixed Water Sprinkling	20.0	2.70
Wheel Washing Facility	<mark>35</mark> .0	5.0
Bridge Construction over Karo River	450.0	5.0
Greenbelt and Plantation	15.0	1.5
Vac <mark>uum cleaner</mark>	60.0	3.0
Dry fog system for crushing and screening plant	27.0	3.0
Continuous ambient air quality monitoring station	60.0	9.0
Parking Plaza for trucks with proper amenities	25.0	2.5
Construction of cement concrete road from mine	60.0	2.0
entrance to exit	00.0	5.0
Effluent Treatment Plant	10.0	1.5
Sewage Treatment Plant	15.0	2.25
Surface Runoff Management Structures – Retaining	110.0	7.0
Wall, Garland Drain, Settling Ponds	110.0	7.0
Rooftop Rainwater Harvesting	5.0	0.75
Piezom <mark>eters – 2 Nos.</mark>	3.0	0.6
Electronic Display Board	3.0	0.3
Environmental Monitoring	8.0	2.4
EMC Manpower	<u>е.</u>	23.0
Awareness Programs in nearby villages	-	6.0
ISO Certification	-	3.0
Total	966	88.7

xvii. Detailsof the Environmental Management Plan (EMP):

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)	
Total cost of EMP (Capital Cost of EMP +	Rs.19.3 Lakhs (9.66 + 9.64) Capital cost	
capital cost of Public hearing)	Rs.88.7 Lakhs Recurring Cost	
Project Cost	Rs.96 Crores	

	005
Employment (No.s)	335

3. Observation and Recommendation of EAC:

The instant proposal is for Environmental Clearance for Laserda- pacheri Manganese mining of Iron and Manganese. The Proposal attracts the general conditions as the Odisha – Jharkhand Interstate Boundary is located at a distance of 3.19 km from the mine lease area and falls under Category 'A'.

An elephant corridor i.e. Karo-Karampada is located at a distance of 2.31 km from the project site, EAC took note of the replies submitted by the PP to the ADS raised during the 26th EAC meeting held during 31st January 2024- 1st February 2024. The EAC noted the comments received from the Project Elephant Division of the Ministry and asked the PP to take measures for the conservation and protection of elephants and their habitats in order to avoid the human-elephant conflict. EAC also noted that there are multiple court cases going on w.r.t. Elephant Corridor, therefore the Project Proponent should be vigilant enough to take note of those cases and be in the compliance of the outcome of the Hon'ble court's decision.

Subsequently, the EAC stated that as per the SOTM recommendation by CSIR-NEERI, the proposal comes under SOTM 3 i.e. EC capacity between 1 MTPA &<3 MTPA. Therefore, the Project Proponent should make the transportation plan with minimum 70% (i.e. upto 1.081 MTPA) by public railway siding and maximum 30% (i.e. upto 0.464 MTPA) by road. Further, the EAC advised the PP to protect and conserve the river Karo which is passing through the mine lease area by prohibiting mining activity 50 m away from the river. The EAC also asked PP to implement the budget of Rs 9.63 Cr which has been earmarked to address the concerns raised during public hearing. EAC also took note of the implementing budget of Rs 966 lakhs which has been earmarked as a capital cost towards Environment Management Plan (EMP) and Rs 88.7 Lakhs as a recurring cost.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its EAC (Non-Coal Mining) meeting held during 9-10th May, 2024 **recommended** the proposal under the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance for Laserda - Pacheri Manganese and Iron Ore mining with production capacity of 1.545 MTPA (ROM) of Iron Ore, 1.182 MTPA of waste (Total Excavation of Iron Ore 2.728 MTPA) and 0.110 MTPA (ROM) of Manganese Ore, 0.355 MTPA of waste (Total Excavation of Manganese Ore 0.465 MTPA) along with Dry screening and crushing using 200 TPH x 2 Primary Crushing, 200 TPH x 2 Secondary Crushing, 200 TPH x 2 Tertiary Crushing, 250 TPH x 2 Vibrating Screen and 150 TPH x 1 Vibrating Screen in the ML area of 131.800 ha by M/s Thriveni Earthmovers Private Limited located at Villages Dhanurjaypur, Kanarda and Laserda,

Tehsil Barbil, District Keonjhar, Odisha subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

Specific conditions:

- i. The Project Proponent shall implement the measures for the conservation and protection of elephant corridor in order to avoid the human-elephant conflict.
- ii. The Project Proponent needs to implement the SOTM recommendation by CSIR-NEERI as the proposal comes under SOTM 3 i.e. EC capacity between 1 MTPA &<3 MTPA. Therefore, the Project Proponent should make the transportation plan with minimum 70% (i.e. upto 1.081 MTPA) by public railway siding and maximum 30% (i.e. upto 0.464 MTPA) by road.
- iii. The Project Proponent needs to submit the six-monthly report upon the progressive status of transportation of mineral through Rail and Road.
- iv. The Project Proponent shall strictly adhere to the action plan to monitor the movement of wildlife in the vicinity of the mine lease area.
- v. 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.
- vi. The Project Proponent needs to submit the annual compliance of the effectiveness of the Wildlife Conservation Plan to Ministry's Regional Office.
- vii. The Project Proponent needs to take adequate measures for protection of the river Karo which is passing through the mine lease area. The PP needs to prohibit the mining activity upto 50 m on either side of the river Karo. The natural water bodies and other streams which are flowing in and around the mine lease area should not be disturbed and mining activity shall be prohibited within 50 m from their boundaries.
- viii. Regular monitoring on surface water flow, turbidity & water quality shall be carried out and report shall be submitted quarterly to the Ministry's Integrated Regional Office.
- ix. The Project Proponent should install the 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.
- x. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the lease boundary of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.

- xi. The Project Proponent needs to conduct the scientific study for carrying out blasting by the reputed Institute within a period of six months from the start of mining operations. The ground induced blasting vibrations shall be monitored regularly for every blast performed and the values of "peak particle velocity" and "Air Over Pressure" shall be maintained below the permissible value prescribed by the DGMS, from time to time. The data needs to be maintained and submitted along with the six monthly compliance report. The implementation status of the scientific study to be carried out by the reputed Institute shall be submitted to the Ministry's Regional Office and DGMS.
- xii. The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area.
- xiii. Garland drains and catch drains shall be regularly desilted and maintained periodically at regular intervals.
- xiv. The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
- xv. 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. All the screens and screeing plant should be properly covered and proper arrangement of dust suppression system should be provided for dust control. 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/DG set shall be carried out at periodic intervals. Continuous noise monitoring meters shall be established inside and outside of the crusher.
- xvi. The Project Proponent needs to complete the entire 7.5 m peripheral plantation and safety barrier plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of 10 m 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.
- xvii. The budget of Rs 963.8 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. Activity-wise details of Public Hearing Budget are as follows:

S.No. Particulars Budget (Rs. In Lakhs)

1.	Employment	504
2.	Drinking Water	30
3.	Road	50
4.	Electricity/Lighting	10
5.	Education	135.4
6.	Infrastructure	12.4
7.	Health	153
8.	Plantation	3
9.	Self-Employment and SHG support	44
10.	Sports	22
	Total	963.8

xviii. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 966 Lakh as capital cost and 88.7 lakh as recurring cost. 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 Regional Office. The item-wise details of the Environment Management Plan is as follows:

S.No.	Item	Capital Cost Recurring Cost		Timeframe
		(Rs. in	(Rs. InLakhs)	for
		Lakhs)		Capital Cost
1.	Mobile Water Sprinkling	60.0	7.20	1st year
	3		5	onwards
2.	Fixed Water Sprinkling	20.0	2.70	1st year
	o ects i	f She "		onwards
3.	Wheel Washing Facility	35.0	5.0	1st year
		REE	5	onwards
4.	Brid <mark>geConstruction ove</mark> r Karo River	450.0	5.0	6 months
_			01	_
5.	Greenbelt and Plantation	15.0	0 1.5	5 years
6.	Vacuum clean <mark>er</mark>	60.0	3.0	1st year
				onwards
7.	Dry fog system for crushing and	27.0	3.0	1st year
	screening plant			onwards
8.	Continuous ambient air quality	60.0	9.0	1st year
	monitoring station			onwards
9.	Parking Plaza for trucks with proper	25.0	2.5	1st year
	amenities			onwards

10.	Construction of cement concrete road	60.0	3.0	1st year
	from mine entrance to exit			onwards
11.	Effluent Treatment Plant	10.0	1.5	1st year
				onwards
12.	Sewage Treatment Plant	15.0	2.25	1st year
				onwards
13.	Surface Runoff Management	110.0	7.0	1st year
	Structures – Retaining Wall, Garland			onwards
	Drain, Settling Ponds			
14.	Rooftop Rainwater Harvesting	5.0	0.75	1st year
	e-Ki		Can	onwards
15.	Piezometers – 2 Nos.	3.0	0.6	1st year
				onwards
16.	Electronic Display Board	3.0	0.3	1st year
		V E		onwards
17.	Environmental Monitoring	8.0	2.4	1st year
	ST D' AT	ALL PAR		onwards
18.	EMC Manpower	1 1 3	23.0	1st year
				onwards
19.	Awareness Programs i <mark>n n</mark> earby		6.0	5 years
	villages			
20.	ISO Certification	3-20	3.0	5 years
	Total	966	88.7	

xix. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

- xx. 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 noncompliance or infringement should be reported to the concerned authority.
- xxi. 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.
- xxii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

- xxiii. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities.
- xxiv. The Project Proponent shall 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 occupational health shall be carried out every year for mine workers. PP will also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
- xxv. Over loading of transport equipment's should be avoided to prevent spillage. Vehicles involved in transporting the material should be covered with tarpaulin to prevent fugitive dust emission.
- xxvi. The mining lease holders will undertake to re-grass the mining area after ceasing of the mining operations and any other area which may have been disturbed due to their mining activities. They shall restore the land to a condition which is fit for cultivation, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office within six month.
- xxvii. The Project Proponent shall adhere to the pollution control measures suggested by the Central Pollution Control Board (CPCB) in the environmental guidelines for crushing/screening activity.
- xxviii. The Project Proponent shall comply with the directions passed in the matters which are sub-judice before the Hon'ble Supreme Court, High Court and NGT with regard to the elephant corridor.

1.7 Bolani Iron Ore Mine with production capacity of 15,000 TPA of Manganese Ore (RoM) in the ML area of 1786.74 ha or 6.9 sq mile of M/s SAIL located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha - [Online Proposal No. IA/OR/MIN/466261/2024, File No. J-11015/396/2008-IA. II (M)] - Amendment in EC letter dated 21.12.2012 under EIA notification 2006 Notification.

The instant proposal is for amendment in EC dated 21.12.2012, 17.02.2014, 30.07.2020, 05.08.2021, 19.09.2022 and 13.09.2023 for Bolani Iron Ore Mine with production capacity of 15,000 TPA of Manganese Ore (RoM) in the ML area of 1786.74 ha or 6.9 sq mile of M/s SAIL located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meetingare given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 250 ha and appraised at Central level.
- The mine lease area is located between Latitude 22°05'11.65848"N 22°07'46.2869"N and Longitude 85°16'52.81330"E 85°20'13.85260"E. The mine lease area falls under the Survey of India Toposheet no: 73 F/8 (F45H8) and falls in Seismic Zone-II.
- iii. The Project Proponent has submitted the chronology of the Environmental Clearance (EC) as mentioned below:
 - a. The Project Proponent obtained Environmental Clearance (EC) on 21.12.2012 for Bolani Iron Ore Mine with production capacity of 15,000 TPA of Manganese Ore (RoM) in the ML area of 1786.74 ha or 6.9 sq mile of M/s SAIL located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.
 - b. The Project Proponent obtained Environmental Clearance (EC) on 21.12.2012 for enhancement of production of iron ore from 5.65 million TPA to 12.0 million TPA (ROM) in Bolani Iron Ore Mine (5.1 Sq. mile) along with installation of a new beneficiation plant of 12 million TPA throughput and pellet plant of 4.0 million TPA capacity of M/s SAIL, located at village Bolani, Tehsil Barbil, District Keonjhar, Odisha.
 - c. Subsequently, the Project Proponent obtained amendment in EC dated 21.12.2012 on 17.02.2014 w.r.t Para 6 (iii) and in addition the following was added to the EC letter "There are two adjacent mining leases in 'Bolani Ore Mines viz Bolani 5.1 Sq. miles lease' 'Bolani 6.9 Sq. miles lease'. Bolani 5.1 Sq. miles lease is the iron ore bearing area whereas Bolani 6.9 Sq. miles lease is manganese ore bearing. Common infrastructure facilities for both the mines viz. railway siding & loading yard township, tailing pond, water intake point etc. are located in 6.9 Sq. miles lease" and that the mine working will be open cast fully mechanized instead of semi-mechanized.
 - d. Thereafter, PP obtained EC on 30th July, 2020 under para 7(ii) of EIA Notification 2006 (as amended) for change in excavation & dispatch pattern by increasing excavation and dispatch of iron ore fines from existing Fines Dumps up to 3.0 MTPA (from present 0.5 MTPA) and Modification of Mining parameters including updating of reserves and waste generation keeping total production within approved EC capacity of 12 MTPA. Bolani Iron Ore Mine (1321.45 ha) is located at Villages Boiani & Balagoda and Karo Reserve Forest (R.F.) in Barbil Tehsil, Champua Subdivision, Keonjhar District of Odisha with one of the specific condition that "This amendment is valid for a period of one year and the same may be extended after the site visit or compliance monitoring by Regional Office, whichever is earlier".
 - e. Further, PP obtained EC vide letter dated 05.08.2021 for amendment/extension of validity of EC dated 30.07.2020 for one year along with permitting dispatch of

8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump by SAIL's Bolani Rly. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and 1.5 MTPA from fines dump by Public Sidings Bolani/Barbil or by Road keeping total production within approved EC Capacity 12 MTPA under Para 7(ii) of the EIA Notification 2006.

- f. Again, the PP obtained amendment in EC on 19.09.2022 for the amendment in EC's dated 30.07.2020 and 05.08.2021 for extension of validity of EC for a further period of one year along with permitting dispatch of 8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump by SAIL's Bolani Rly. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and1.5 MTPA from fines dump by Public Sidings Bolani/Barbil or by Road keeping total production within approved EC Capacity 12.0 MTPA located at village Boiani, TehsilBarbil, District Keonjhar, Odisha. This amendment in EC is valid upto 18.09.2023.
- g. Later on, the PP obtained amendment in EC on 13.09.2023 for amendment in EC's dated 30.07.2020, 05.08.2021 & 19.09.2022 of M/s SAIL for extension of validity of Environmental Clearance for further period of 02 (Two) years to liquidate entire stock of old Dump Fines from Bolani Iron Ore Mines by (i) continue excavation of iron ore fines from old Fines Dumps maximum up to 3 MTPA for selling in open market or supplying to external pellet conversion agencies for captive use of converted pellets keeping the total production within EC capacity of 12 MTPA, (ii) continue dispatch of 8.5 MTPA ROM Iron Ore from mines, 1.5 MTPA from fines dump with total dispatch up to 10 MTPA by SAIL's Bolani RIy. Siding and dispatch of 0.5 MTPA from Iron Ore from Mines and1.5 MTPA from fines dump with total up to 2 MTPA through public roads leading to Public Sidings at Bolani / Barbilor beyond NH 520 within approved EC Capacity 12.0 MTPA, in the mine lease area of 1321.45 ha, located at Village Bolani, Tehsil- Barbil, District Keonjhar, Odisha.
- iv. In the instant proposal, the Project Proponent requested for amendment in EC's letter dated 21.12.2012 forBolani 6.90 Sq Miles ML (1786.74 ha) allowing liquidation of old iron ore dump fines produced from adjoining Bolani 5.10 Sq Miles ML and stacked in Bolani 6.90 Sq. Miles ML through dispatching for selling in open market or captive use directly or supplying to conversion agents for captive use of converted pellets without any change in approved configuration keeping the excavation and dispatch of dump fines from both mining leases, within 3.0 MTPA, as per the approved EC of Bolani 5.10 Sq. Miles ML under Para 7(ii) of the EIA Notification 2006 at Village Bolani,Balagoda, Limitur etc. Tehsil Barbil, District Keonjhar, Odisha
- v. The Project Proponent has submitted the following justification for instant proposal for liquidation on the strength of EC of Bolani 5.10 sq miles ML:
 - a. No change in process and/or technology, product mix, handling capacity of the mineral.

- b. The assessed the likely impacts, on the local road infrastructure and air quality of the area, due to the proposed liquidation of dump fines shall remain unchanged.
- c. The baseline environmental data covering air, water, noise etc., in and around Mines, has been carried out and incorporated in the addendum to EIA/EMP Report which shows that the environmental quality in and around was found to be within the permissible limits.
- d. The proposed liquidation of fines will not only result in effective utilization of these low grade minerals, but also eliminates environmental hazards for Bolani 6.90 sq miles ML associated due to storage of fines besides meeting the iron ore demand during scarcity period of the country.
- vi. The Project Proponent has informed that the 4.123 MT of iron ore dump fines stacked inside this ML, which were originally generated from the adjoining 5.10 Sq Mile ML, is proposed to be evacuated in the strength of Amended EC grant Order dated.13.09.2023 of Bolani 5.10 Sq Miles ML.
- vii. The Project Proponent has submitted the following effect on configuration of Bolani 1321.45 ha or 5.10 SQ Miles ML area:

Plant / Equipment / Facility Iron ore excavation from Fines Dumps	Existing Configuration as per EC amendment order dated 13.09.2023 3 MTPA Dump Fines from 5.10 sq miles ML	Configuration as per Instant Proposal 3 MTPA Dump Fines from 5.10 sq miles ML + 6.90 sq Mile ML	Remarks, if any No change in handling quantity of dump fines from Bolani Ores Mines complex
Dispatch by SAIL's own siding	Max. up to 1.5 MTPA dump fines from 5.10 sq miles ML	Max. up to 1.5 MTPA dump fines from 5.10 sq miles ML + 6.90 sq Mile ML	Within the earlier approved EC capacity
Dispatch of dump fines by road	Max. up to 1.5 MTPA by Road & Rail or only Road from 5.10 sq miles ML	Max. up to 1.5 MTPA by Road & Rail or only Road from 5.10 sq miles ML + 6.90 sq Mile ML	By road to Bolani Public/Barbil Railway Siding or directly by road to the final destination
Dispatch of fresh Iron Ore on road	Max. up to 0.5 MTPA by Road & Rail or only Road from 5.10 sq Mile ML	No Change	No Change from earlier EC in despatch of max. 2MTPA(0.5MTPA

Minutes of 29th EAC (NCM) during 9-10th May, 2024
	fresh Iron Ore& 1.5MTPA dump
	fines)

1.7.3 Observation and Recommendation of EAC:

The instant proposal is for amendment of EC letter dated 21.12.2012 for liquidation of old iron ore dump fines produced from adjoining Bolani 5.10 Sq Miles ML and stacked in Bolani 6.90 Sq. Miles ML through dispatching for selling in open market or captive use directly or supplying to conversion agents for captive use of converted pellets without any change in approved configuration keeping the excavation and dispatch of dump fines from both mining leases.

The EAC pointed out that the instant application is inconsistent with the judgement passed by the Hon'ble Supreme Court in the matter of Goa foundation vs Union of India WP (C) No. 435/2012 dated 21.04.2014. As per the sub-para (ii) of para no. 71 of the judgement:

"dumping of minerals outside the leased area of the mining lessees is not permissible under the MMDR Act and the Rules made thereunder".

Therefore, the EAC asked the Project Proponent to submit the certificate from the state government for clarifying the exact duration in year in which the old iron ore dump fines are generated, their exact quantity and location of dump as per the then approved Mining plan. EAC also noted that the ML area as per the EC letter dated 21.12.2012 is 1786.74 ha while as per the documents submitted in the instant EAC meeting the lease area is 1586.36 ha or 6.9 Sq miles. Therefore, PP was advised to submit the Mine lease documents of Bolani iron ore mine of 6.9 Sq. miles along with its chronology.

In view of the above, the Committee **deferred** the proposal and asked to submit the following information:

- i. The Project Proponent needs to justify their proposal w.r.t. judgement dated 21.04.2014 of Hon'ble Supreme Court in the matter of Goa Foundation Vs UOI.
- ii. The Project Proponent needs to submit the certificate from the Department and Mines Geology, Govt. of Odisha clearly stating the source of the dumped iron ore and its generation period (before or after year 2014). The State Govt. shall also mention the year till which the fine iron ores were dumped.
- iii. The Project Proponent needs to submit the year-wise authenticated quantity of old iron ore dump in tabular form.

- iv. The Project Proponent needs to submit the authenticated documents such as Mine plan or any other document showing the dumping location of old iron ore dump.
- v. The Project Proponent needs to submit the Mine lease documents certifying the exact mine lease area of 1786.74 ha or 1586.36 ha or 6.9 Sq miles.

Day 2: 10th May, 2024 (Friday)

2.1 Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat. [Online Proposal No. IA/GJ/MIN/448536/2023, File No. IA-J-11015/150/2018-IA-II(NCM), EIA Consultant - M/s Anacon Laboratories Pvt. Ltd] - Environmental Clearance under MoEF&CC Notification S.O.1530(E) dated 6th April 2018 reg.

The instant proposal is for Environmental Clearance under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 23°13'17"N 23°15' 58" N and Longitude: 69°07'24"E 69°10' 41"E. The mine lease area falls under the Survey of India Toposheet No: 41 E/4 and falls in Seismic Zone V as per IS-1893 (Part-1)-2002.
- iii. Details of previous Environmental Clearance (EC):
 - a. The Project Proponent obtained Environmental Clearance (EC) vide Lr no. J-11015/131/2005-IA II(M) dated 08.12.2005 for production capacity of 42,000 TPA of Bauxite over an area of 299.40 ha under the EIA Notification, 1994.
- iv. Details of Terms of Reference (ToR):
 - a. The Project Proponent obtained Terms of Reference (ToR) vide Lr.No: IA-J-11015/150/2018-IA-II(NCM) dated 18.04.2022 for Mothala Balachod Bauxite Mining Project for the Production Capacity of 42,000 TPA of Bauxite in the

mine lease area of 280.7686 Ha under MoEF&CC Notification S.O.1530(E) dated 6th April 2018.

- v. Details of Mine Lease:
 - a. The Project Proponent submitted that initially mining lease was granted by the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G58/703/CHH dated 12.01.2006 for mineral Bauxite over an area of 299.40.05 ha for the period of 30 years.
 - b. Then, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH dated 02.02.2007 revised and the granted the mine lease area for 280.76.86 ha. The lease agreement was thereof executed on 07.03.2007.
 - c. Further, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH have extended the lease period up to 06.03.2057.
- vi. Details of Land Use/Land Cover of the Mine Lease Area:

Privat <mark>e land</mark>	-			
Gove <mark>rnment land</mark>	280.7686 Ha			
Total Mining lease area (MLA)	280.7686 Ha (Government			
	Waste Land)			
vii Minimu plan datailas				

vii. Mining plan details.							
Review and updation of Mining Plan along with Progressive Mine Closure Plan approved by Indian	Letter No.	Approved from IBM Gandhinagar vide letter no. 684(4)(1)(MP- 345(117)/2021-22 GNR/1339					
Bureau of Mines (IBM)	Date	13/08/2021					
Ga <mark>ndhinagar.</mark>	Validity	31/03/2026.					
Mining Parameters	Quantitative	e Description					
Bench Height	3 m	Sher					
Bench Width	3 m	- EN S					
Method of Mining	Semi Mechanized Open Cast Mining						
Individual bench slope	70 ⁰ from the vertical						
Overall pit slope	370						
Drilling/Blasting	In order to m shallow hole combined w transportation (Bucket cap use. During to separately the subsequ	neet the present requirement of production e drilling, blasting, mechanized excavation with manual sorting and loading and on by small to medium size excavator acity around 1 Cum.) and dumper, are in loading ample precautions are being taken / load the waste material and thus minimize ently sorting of the ROM.					
RoM output size	9600 MT						
Life of mine	49 Years						
Transportation details	Dumpers						

Minutes of 29th EAC (NCM) during 9-10th May, 2024

90 | Page

Dumpers capacity	17tonnes			
Mineable Reserves	20,62,589 Tonnes (as on 01.04.2021)			
Individual bench slope	70° from the vertical			
Ultimate depth of mining	5 mbgl			
Groundwater level	15-20m bgl			
Groundwater intersection	No groundwater intersection			
Overall pit slope	37°			
Details of existing and	There is no proposal to install crusher within the mining			
proposed	lease area.			
Mineral beneficiation	There will be no mineral beneficiation activities within			
e-11	the mine lease area.			
Transportation details	The graded bauxite ore is being transported from			
	Mothala - Balachod Bauxite Mine to Gujarat Credo			
	Mineral Industries Ltd and allied industries through			
	thereby SH-49			
Dum <mark>pers capacity</mark>	17tonnes			
Generation of Topsoil/OB &	There will be no generation of Overburden & Mineral			
its Management during plan	rejects during the plan period (2021-22 to 2025- 26).			
pe <mark>riod & concep</mark> tual period				
G <mark>eneration of</mark> Mineral	Topsoil generation in current plan period (2021-22 to			
R <mark>ejects/ Wa</mark> ste & its	2025-26) is 16173 cumand shall be disposed of by			
M <mark>anagement</mark> during plan	means of stacking or by backfilling in mine voids & use			
pe <mark>riod & conceptu</mark> al period 🌍	in development of green belt respectively.			

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

Particulars		Particular's Nan	ne	Distance & Directions				
Nearest Village/Town		Balachod Nani	87	0.5	km	in	East	
		CGREE		direction				
Nearest High	iway	SH 49		6.47	Km/ S			
Railway Stati	on 6	Bhuj		53.90) Km/	E		
Nearest Air Port		Bhuj 51.88 Km/ E						
Nearest	Reserved/Protected	Open Mixed Jur	Adjacent/W					
forests		Wamoti Reserve	5.17 Km, /N					
		Mothala Reserv	7.15 Km/ SSW					
		Naranpar	Reserve	6.34	Km/E			
		Forest						

ix. Water requirement

Total water requirement	32 KLD	Fresh water	32 KLD
		Treated water	-
Source	Existing water	r supplier through mobile	tankers.

Permission	NA
Additional information (if any)	No additional water requirement envisaged in this project. Moreover, rain water accumulated in pits, if any, is being used for dust suppression and this will be continued as such in future also.

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/	Yes/No	Details of Certificate /letter/Remarks
Protected Area		
/Environmental		
Sensitivity Zone	1 at	
Forest Land	No	The Project Proponent submitted the letter from the
National Park	No	Forests & Environment Department, Government of
Wildlife Sanctuary	No	Gujarat vide letter dated 27.12.2023 stating that the
	· · ·	site is adjoining to forest area. Applicant is required
		to do mining by keeping 50-meter distance from
	25	forest area as per Chief Conservator of Forest,
2	~ ~	Wildlife, Gujarat State, Gandhinagar's letter
Ego Consitius Zana	No	WPS/32/B/ 11755- 62/99-2000 Date:30/12/1999.
ECO-Sensitive Zone	INO	Project Proponent reported that there is no National
		Park, Wildlife Sanctuary, Biosphere Reserve, Figer Reserve, within the 10 km radius study area. The
		nearest wildlife sanctuary is Great Indian Bustard
	2	Sanctuary is about 44.50 km in West direction from
	12	project site.
Coastal Regulation	No	Not Applicable
Zone (CRZ)		Crects of SWC V
Schedule-I species	Yes	Project Proponent submitted that the Deputy
(No.s and name of		Conservator of Forest, Kutch West Division vide
schedule-I species	74	Lr.No: B/LAND/T-11/4355/2023-24 dated
with authenticated		13.12.2023 mentioned that following Schedule - I
letter)		species are observed in a study area of 10 km radius
		such as Peafowl (Pavo cristatus), Chinkara (Gazella
		bennettii), Indian Monitor Lizard (Varanus
		benghalensis), Leopard (Pantherapardus), Striped
		Hyena (Hyaena hyaena), Jungle Cat (Felis chaus),
		Honey Badger(Mellivoracapensis) and India
Wildlife Concernation	Vaa	Crocodile (Crocodyluspalustils).
	res	submitted to the PCCE & Chief Wildlife Wardon
		Gandhinagar vide Letter No. GMDC/ENV/140/2023-
		24 dated 18.11.2023 for approval.

xi. Greenbelt/plantation Details

Proposed area for green belt/plantation	Existing: 3.94 Ha (4,310 no. of saplings) Proposed 2.5Ha (3,000 no. of saplings during Plan Period) Total: 6.44Ha during end of plan period Total				
	Green Belt at the end of life of mine will be 10.00Ha.				
Budget for green plant& plantation	4.0 Lakhs				
till the end of life of mine.					
Budget for nursery	-				

xii. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)								
Period of baseline	Baseline Monitoring studies is being already carried out during							
data collection	Winter Season: Period (1 st Dec. 2019 to 29 th Feb. 2020) and							
Season (Summer /	Additional one month baseline monitoring 1st May 2022 to 31st							
Pre-monsoon / Post-	May 2022) - Summer Season).							
monsoon / Winter)								

Details of Baseline data (1st Dec. 2019 to 29th Feb. 2020-Winter Season) and revalidation of baseline data (1st May, 2022 to 31st May, 2022- Summer Season) as mentioned below:

A. Air Environment: Summary of Ambient Air Quality Results for Period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022- Summer Season

Sr.	Location		N.	PM 10	PM2.5	SO ₂	NO ₂	CO	Ozone	NH₃
No.	2		- 97	µg/m³	µg/m ³	µg/m³	µg/m³	m <mark>g/m</mark> ³	µg/m³	µg/m³
1	Project Site	,Dec,	Min-	58.0 -	18.5-	11.7-	17.9-	<mark>0.3</mark> 51 -	8.3 –	7.6 –
	Block-I	<mark>201</mark> 9 –	Max	75.5	26.3	17.6	25.3	0.475	12.2	11.5
	1 ⁹ 13	Feb, 2020	98 th	74.9	26.0	17.4	24.8	0.469	12.0	11.3
		May,	Min-	58.5-	21.4-	<u>10.1</u> -	14.9-	0.323-	7.9-	6.7-9.2
		2022	Max	72.4	27.4	15.3	19.2	0.401	10.4	
			98th	67.5	27.2	15.2	19.1	0.399	10.3	9.1
2	Project Site	,Dec,	Min-	61.9-	19.7-	10.2-	16.2-	0.241-	6.7-	7.7-
	Block-II	2019 –	Max	78.2	34.0	16.1	23.0	0.520	13.0	14.2
		Feb, 2020	98 th	77.0	33.4	15.7	23.0	0.514	12.9	13.8
		May,	Min-	58.5-	22.3-	9.5-	14.2-	0.264-	7405	6606
		2022	Max	72.4	31.4	13.4	19.7	0.348	1.4-9.5	0.6-9.0
			98 th	71.6	31	13.3	19.5	0.346	9.5	9.6

3	Khanpar	Dec,	Min-	49.4-	16.8-	9.4-	8.9-	0.242-	7.5-	5.9-8.5
		2019 –	Max	68.9	22.9	15.1	13.9	0.308	12.4	
		Feb, 2020	98 th	67.8	22.8	14.8	13.6	0.306	12.0	8.4
		May, 2022	Min- Max	50.6- 65.9	16.4- 23.6	7.7- 10.7	12.2- 16.9	0.237- 0.301	6.1-8.8	6.1-7.8
				65.9	23.6	10.7	16.9	0.301	8.8	7.8
			98 th	65.0	<mark>23</mark> .4	10.6	16.8	0.300	8.8	7.8
4	BalachodNani	Dec,	Min-	57.7-	<mark>19.3-</mark>	6.1-	16.6-	0.178-	7.5-	4.9-9.2
		2019 –	Max	76.6	26.1	9.7	23.4	0.269	14.1	
		Feb, 2020	98 th	75.5	25.9	9.4	23.0	0.263	14.0	9.0
		May,	Min-	48.1-	18.1-	6.8-	<u>15.</u> 4-	0.254-	7.6-	7206
		<mark>20</mark> 22	Max	71.1	26.3	9.7	20.6	0.312	12.1	7.3-9.0
			98 th	70.7	26.2	9.6	20.4	0.309	12	9.6
5	Mothala	Dec,	Min-	61.2-	17.3-	6.6-	11.4-	0.246-	8.8-	6.1-
	2	2019 –	Max	85.1	26.6	9.5	17.2	0.3 <mark>71</mark>	15.8	11.6
	~	Feb, 2020	98 th	82.2	25.7	9.2	17.0	0.358	15.6	11.2
		May,	Min-	<mark>63</mark> .8-	22.8-	11.5-	16.4-	0.274-	9.6-	7.9-
		2022	Max	72.4	33.4	17.1	21.6	0.572	13.4	11.5
			98 th	72.2	33.2	17.0	21.5	0.563	13.2	11.5
6	Bhawonipur	Dec,	Min-	53.3-	16.7-	7.3-	12.6-	0.240-	8.1-	4.7-7.8
		2019 –	Max	67.5	23.6	10.9	17.5	0.313	12.1	
	S I	Feb, <mark>2020</mark>	98 th	67.0	23.3	10.6	17.0	0.308	11.9	7.4
	· 201.	May,	Min-	51.7-	20.3-	8.3-	12.4-	0.213-	0005	C 4 0 5
		2022	Max	67.7	26.2	11.2	15.3	0.321	0.9-9.5	0.4-8.5
		°₀ /	98 th	67.4	26.1	11.1	15.2	0.316	9.5	8.4
7	WamotiMoti	Dec,	Min-	59.0-	20.3-	9.0-	10.8-	0.260-	6.7-9.7	5.4-8.5
		<mark>201</mark> 9 –	Max	80.4	28.3	13.1	17.2	0.336		
		Feb, 2020	98 th	79.3	27.7	13.1	16.8	0.330	9.6	8.5
		May,	Min-	58.7-	23.6-	10.8-	13.5-	0.324-	8.4-	8.2-
		2022	Max	71.9	30.2	16.1	20.8	0.373	12.8	10.3
			98 th	71.7	29.9	15.9	20.5	0.371	12.7	10.2
8	Bhimpar	Dec,	Min-	41.8-	14.8-	9.5-	13.9-	0.299-	7.5-	6.4-
		2019 –	Max	66.3	22.4	14.2	19.6	0.359	11.4	10.3
			98 th	65.6	22.4	14.2	19.3	0.353	11.3	9.9

Minutes of 29th EAC (NCM) during 9-10th May, 2024

94 | Page

		Feb,								
		2020								
		May,	Min-	52.3-	18.7-	9.3-	13.5-	0.238-	6902	5 A 7 7
		2022	Max	66.1	24.5	12.2	17.4	0.311	0.0-9.2	5.4-7.7
			98 th	65.4	24.4	12.1	17.4	0.311	9.1	7.7
CPCB Standards		100	60	80	80	2 (8hr)	100	400		
				(24hr)	(24hr)	(24hr)	(24hr)		(8hr)	(24hr)

B. Noise Levels: Details of Ambient Noise Levels for the Period from 1st December 2019 to 29th February 2020) are as mentioned below:

LeqDayLeqNightResidential Area52.442.9•Balachod Nani52.442.9•Mothala54.537.8CPCB Standards dB(A)55.045.0Commercial Area62.549.5•Khanpar62.549.5•Nr. SumrasarTalav55.240.6		
Residential Area•Balachod Nani52.442.9•Mothala54.537.8CPCB Standards dB(A)55.045.0Commercial Area55.045.0•Khanpar62.549.5•Nr. SumrasarTalav55.240.6		
Balachod Nani 52.4 42.9 Mothala 54.5 37.8 CPCB Standards dB(A) 55.0 45.0 Commercial Area 62.5 49.5 Nr. SumrasarTalav 55.2 40.6		
Mothala 54.5 37.8 CPCB Standards dB(A) 55.0 45.0 Commercial Area 62.5 49.5 Nr. SumrasarTalav 55.2 40.6		
CPCB Standards dB(A) 55.0 45.0 Commercial Area 62.5 49.5 • Khanpar 62.5 49.5 • Nr. SumrasarTalav 55.2 40.6		
Commercial Area • Khanpar 62.5 49.5 • Nr. SumrasarTalav 55.2 40.6		
• Khanpar 62.5 49.5 • Nr. SumrasarTalav 55.2 40.6		
Nr. SumrasarTalav 55.2 40.6		
• Bhimpar 58.9 47.9		
CPCB Standards dB(A) 65.0 55.0		
Silence Zone		
Balachod Moti 47.1 36.4		
CPCB Standards dB(A)50.040.0		
Industrial Area		
• Project Site (Block- I) 68.5 42.0		
Project Site (Block- II) 66.8 43.1		
CPCB Standards dB(A)75.070.0		
(Period – 1 st Ma <mark>y 2022 to</mark> 31 st May 2022)		
Sr. No. Monitoring Locations CVINCI Equivalent Noise Level		
LeqDay LeqNight		
Residential Area		
Balachod Nani 51.4 40.8		
• Mothala 53.3 42.5		
CPCB Standards dB(A)55.045.0	45.0	
Commercial Area		
• Khanpar 63.1 52.4		

•	Nr. Sumrasar Talav	57.5	41.7
•	Bhimpar	57.2	46.5
CPCB Standa	ards dB(A)	65.0	55.0
Silence Zone			
•	Balachod Moti	48.3	37.1
CPCB Standa	ards dB(A)	50.0	40.0
Industrial Are	a		
•	Project Site (Block- I)	64.2	41.4
•	Project Site (Block- II)	63.7	42.1
CPCB Standa	ards dB(A)	75.0	70.0

C. Water Environment: Summary of Surface Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

		Baseline	Additional 1 Month	IS 2296:1992;
8		Monitoring Period	Baseline Monitoring	Class C
\leq		(1 st Dec, 2019 -	(1 st May, 2022 –	(Drinking water
Parameters	Unit	29 th F <mark>eb, 2</mark> 020)	<mark>31st M</mark> ay, 2022)	source after
				conventional
		Range	Range	treatment and
				dis-infection)
pН	4	6.57 – 7.73	6.95 - 7.92	No relaxation
		30		(6.0 to 9.0)
EC	µs/cm	716 – 1879.70	936.25 - 2130.66	-
TDS	mg/l	442 – 1100	535 – 1246	1500
Total	ma/l	123 22 107 06	182 46 266 21	
hardness	mg/i	123.22 - 197.90	102.40 - 200.21	
DO	mg/l	<mark>6.0 – 6.3</mark>	<mark>5.2 –</mark> 5.9	4.0
BOD	mg/l	3.6 – 7.1	<mark>4.81 –</mark> 8.25	3.0
COD	mg/l	11.7 – 22.4	<mark>17.35 –</mark> 42.51	-
Chloride	mg/l	63.59 – 148.61	<mark>73.13 – 1</mark> 70.90	600
Sulphate	mg/l	7.68 – 48.61	11.14 – 70.48	400
Nitrate	mg/l	4.83 – 19.23	6.57 – 15.27	50
Fluoride	mg/l	0.28 – 0.73	0.35 – 0.91	1.5
Iron	mg/l	0.01-0.28	0.05 – 0.21	0.5
Cadmium	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	0.01
Arsenic	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	0.2
Zinc	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	15

Minutes of 29th EAC (NCM) during 9-10th May, 2024

Lead	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	0.1
Chromium	mg/l	BDL (DL - 0.03)	BDL (DL - 0.03)	0.05
Total Coliform	MPN/100 ml	Present	76 – 240	5,000

D. Ground Water Quality: Summary of Ground Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

Parameters	Unit	Baseline Monitoring Period (1 st Dec, 2019 – 20 th Eeb, 2020)	Additional 1 Month Baseline Monitoring (1 st May, 2022 – 31 st May, 2022)	Permissible Limit
		Range	Range	
рН	-	7.11 - 7.88	7.29 – 8.22	No relaxation (6.5 to 8.5)
EC	µs/cm	1380 – 3300	1371.04 - 3036.25	-
TDS	mg/l	760 – 1818	897 – 1735	2000
Total hardness	mg/l	366.30 – 777.0	446.13 – 772.46	600
Chloride 0	mg/l	136.97 <mark>- 557</mark> .69	160.25 – 492.50	1000
Sulphate	mg/l	18.14 – <mark>10</mark> 4.95	27.57 – 148.15	400
Nitrate	mg/l	BDL (DL -2)- 18.33	3.65 – 21.48	No relaxation (45)
Fluoride	mg/l	0.31 – 1.66	0.36 – 1.91	1.5
Iron	mg/l	BDL (DL - 0.01)– 0.03	0.14 – 0.31	No relaxation (1.0)
Cadmium	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	No relaxation (0.003)
Arsenic	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	No relaxation (0.01)
Zinc	mg/l	BDL (DL - 0.01)	1ent 0.11 - 0.18	15
Lead	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	No relaxation (0.01)
Chromium	mg/l	BDL (DL - 0.03)	BDL (DL - 0.03)	No relaxation (0.05)

E. Soil Quality: Summary of Ground Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

	Physico-Chemical Characteristics				
Parameters	Unit	Baseline Period from 1 st	Additional Study Period		
		Dec, 2019 to 29 th Feb,	From 1 st May, 2022 to 31 st		
		2020	May, 2022		
рН	-	6.9 - 8.4	7.28 – 8.72		
EC	µs/cm	140 - 300	175.59 – 370.96		
Infilteration Rate	mm/hr	17.11 - 20.15	7.86 – 26.48		
Bulk Density	g/cm3	<mark>1.521</mark> – 1.788	1.474 – 1.725		
Water Holding	%	19.17 – 25.42	29.14 - 38.64		
Capacity	X				
Organic Carbon	%	0.25 – 0.68	0.28 - 0.76		
Macro Nutrients					
Nit <mark>rogen</mark>	Kg/hec	77.90 – 120.46	107.5 – 164.32		
Ph <mark>osphorus</mark>	Kg/hec	4.36 – 25.76	28.12 - 45.43		
Potassium	Kg/hec	370.40 - 680.10	240.76 - 351.20		
S S	Q '	Micro Nutrients			
Iron	mg/kg	<u> 1.300 – 1.320</u>	1 <mark>.4</mark> 54 – 2.508		
Manganese	mg/kg	2.32-2.35	4. <mark>71</mark> 0 – 6.589		
Zinc	mg/kg	0.18 – 0.19	0. <mark>14</mark> 7 – 0.216		
Copper	mg/kg	Absent – 0.232	0. <mark>19</mark> 4 – 0.322		
Nickel	mg/kg	Absent	Absent		
Cadmium	mg/kg	Absent	Absent		
Lead	mg/kg	5.05 - 5.11	1.112 – 2.329		
		Concepts of Swe V			

xiii. Details of Public Hearing (PH): The Project Proponent has published the public notice for inviting comments upon present mining operations and their redressal as it is the case of revalidation of existing EC as follows:

Advertisement for PH with date	The Public Hearing was conducted on dtd
Date of PH	11.11.2003 and EC was obtained in 2005. As
Venue	desired by the EAC (Non - Coal). MoEF&CC.
Chaired by	New Delhi and ToR condition for regularization
Main issues raised during PH	of existing EC. M/s. GMDC submitted EIA-
Budget proposed for addressing	EMP report at GPCB, Kutch (West) to carry out
issues raised during PH	public consultation process as per Ministry's
Additional information (if any)	OM dated 16.02.2021.
	Accordingly, an Advertisement/Public Notice was published in English newspaper in "The Times of India" on 03/03/2023 and in Gujarat

	in "Kutch Mitra" on 03/03/2023 for information of the stakeholders to invite comments about present mining operations and their redressal on the above project.
	In connection with the public notice published for a period of 30 days, no any comments, representations are received either by written,
	oral, personnel or through any other media by
SIC.	the projects as mentioned in the
e-KTC	advertisement.

xiv. Court case details:

Court	The Project Proponent submitted that there is no litigation pending against
Ca <mark>se</mark>	the project and/or land in which the project is proposed to be set up.

xv. Rehabilitation& Resettlement:

R & R details	The Project Proponent reported that no private
	land within the mine lease will be acquired for
	mining or any other project related activity and
	hence no rehabilitation and resettlement is
Z	involved under the present proposal.

xvi. Affidavit/Undertaking details:

Affidavit as per	The Project Proponent submitted the Affidavit dated 14.03.2019
Ministry's OM	stating that the company undertakes by affidavit that it will comply
dated 30.05.2018	with all the statutory requirement & judgment of Hon'ble Supreme
	Court dated 2nd August 2017 in writ Petition (Civil) No. 114 of
	2014 in the matter of common cause versus Union of India & Ors
	before grant of ToR/EC.
Undertaking of	The Project Proponent submitted an undertaking to the effect that
Project Proponent	ToR issued by Ministry vide letter dated 18.04.2022 for Mothala
dated 16.10.2023	Balachod Bauxite mine of M/s Gujarat Mineral Development
	Corporation Ltd has been complied with and the data submitted
	is factually correct. The Project Proponent also mentioned that
	they take the ownership of the content of this EIA report.
Undertaking of EIA	The EIA Consultant submitted a declaration stating that no
Consultant dated	unethical practice like 'copy and paste' and used external
18.12.2023	data/text without proper acknowledgement, while preparing this

EIA report. The consultant organization shall be fully accountable
for any misleading information mentioned in this statement.

xvii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Letter no. and date				
Consent to	• Renewal of Consolidated Consent and Authorization (CC&A)				
Establish/	granted by the Gujarat Pollution Control Board (GPCB) vide				
Consent to	Consent C	order No. AWH-125340	dated 04.04.20	23 for mining of	
Operate	raw Bauxi	te of 42,000 MT/annum	n over an area	of 280.76.86 ha	
	and is valid	d up to 08.03.2028.	Cd N		
Certified EC	Certified E	C Compliance of EC c	lated 08.12.200	5 obtained from	
compliance	RO, MoEF	CC, Gandhinagar on c	lated. 13th Nov.	2023. Site visit	
report	was conc	lucted by RO on 0	9.0 <mark>5.</mark> 2023. Pro	ject Proponent	
	submitted	the action taken re	eport to the	RO, MoEFCC,	
	Gandhina	gar on 28.11.2023.			
S I	 The action 	plan for green belt dev	velopment along	y with budgetary	
\sim	expenditur	e and timeline was sub	omitted to the IF	RO, MOEFCC –	
	Gandhinag	gar in line with observat	ion made in EC	compliance.	
	The closu	r <mark>e rep</mark> ort from IRO, Mo	EFCC – Gandh	inagar received	
	on 27.02 2	202 <mark>4</mark>			
Certified past	Year-wise cer	tified past production of	details from Geo	ologist, Geology	
production and Mining Dept., Govt. of Gujarat, District – Kutch are given below					
0	Year	Plant grade & non	Dust & sub	Total (mt.)	
		plant grade	grade (mt.)		
i i i		production (mt.)		0.0	
3.	2006-07	0	0	0	
	2007-08	2323	0 8	2323	
	2008-09	41933	5000	46933	
	2009-10	12846	1285	14131	
	2010-11	36928	5007	41935	
	2011-12	28184	2792	30976	
	2012-13	39096	3802	42898	
	2013-14	32047	3205	35252	
	2014-15	2075	264	2339	
	2015-16	0	0	0	
	2016-17	36422	3652	40074	
	2017-18	10045	200	10245	

2018-19	28796	1269	30065
2019-20	19205.196	791.25	19996.45
2020-21	11896.804	456.20	12353.01
2021-22	23097.388		23097.388
2022-23	2080.268		2080.268

xviii. ADS details:

The Proposal was earlier considered in 26th EAC (Non-Coal Mining) meeting held during 31st January & 1st February, 2024 wherein the Committee has considered and deferred the proposal and requested to submit the additional information. The PP has submitted the reply on 06.04.2024 are as follows:

SI.	ADS Point	Response by Project Proponent
No.		
No. 1.	The Project Proponent needs to justify that why amendment in EC not obtained for change in reduction of mine lease area from 299.40 ha to 280.76.86 ha.	 Earlier a LOI was issued for mineral bauxite over 299.4005 ha area for 20 years vide Gujarat State Govt. grant order no. 4/221/95/M-19 dated 18.07.1997 and same was intimated by Dy. Secretary, Industries & Mines Department, Government of Gujarat vide letter reference no. MC/1591/G-58/703/Chh dated 03.09.1997 with direction to obtain approval of mining plan and environmental clearance from respective competent authorities. The first mining plan for the applied lease area (299.40 ha) was approved by Indian Bureau of Mines vide letter no. 82(23) (291)/99-MCCM(N) UDP dated 14.10.1999. Environmental Clearance was granted for the Mothala Balachod Bauxite mine having production capacity of 42,000 TPA in 299.40 ha under the purview of EIA notification 1994 vide letter no. J-11015/131/2005-IA II (M) dated 08.12.2005. However, as per corrigendum vide letter
		02.02.2007 issued by Under Secretary to

SI.	ADS Point	Response by Project Proponent
No.		
SI. No.	ADS Point	 Response by Project Proponent Government, Industries & Mines Department, Government of Gujarat. Mining Lease area was amended from 299.40 to 280.7686 Ha at the time of lease deed by mentioning that as Commissioner, Geology and Mining has made mining proposal for some change in the area granted to M/s GMDC at Moti- Balachod from 168.6723 Ha. to 150.0404 Ha. in the said order and hence 299.4005 Ha read as 280.7686 Ha. The remaining terms of condition in existing EC viz. method of mining, production capacity, etc. remains unchanged. Thereafter, the mining lease executed on 07.03.2007 vide reference no. GKK/M/021/2240 for 28.7686 only, which was signed by Collector, Kutch and authorities of GMDC for a period of 30 years from the date of mining Lease execution. Thus, Honourable EAC (Non-Coal) is requested to consider EC regularization proposal for 280.7686 Ha lease area for the grant of EC considering the following facts: # Due to oversight it has been missed to seek amendment in this regard. However, lease neither has been increased nor any mining activity carried out beyond the area of lease dead. # approved Mine Plan is for 280.7686 only
	e-Pay	lease neither has been increased nor any mining activity carried out beyond the area of lease dead.
		# approved Mine Plan is for 280.7686 only and the same was share to EAC (Non-Coal) during ToR Application as well as EC Appraisal Application and subsequent presentations.
		# ToR Application submitted for the Regularization of existing EC, under the

SI.	ADS Point	Response by Proje	ect Proponent
No.			
		purview of EIA No 2018, was for 280 detailed discussion Coal) was granted	tification 2006 in the year 0.7686 Ha only and after n, Honourable EAC (Non- I the ToR vide F. No-IA-J-
		280.7686 ha only.	A-11(IVI) 18 April 2022 101
	e-KYC R I	# Certified Compl the Regional Offic issued twice vide dated 13/11/2023 area of mine le 280.7686 ha only.	iance Report (CCR) from ce of MOEFCC has been e Dated 26/03/2019 and and during every site visit, ease was submitted as
		Therefore, look Honourable EAC requested to c Application for the EC for an area 280	ing to the above, (Non-Coal) is kindly onsider EC Appraisal Regularization of existing 0.7686 ha only.
2.	The Project Proponent needs to	Mining method is s	ubmitted hereunder in line
	submit the current practice of	with existing appr	oved mi <mark>ni</mark> ng plan for the
	method of mining in line with the	current period of 2	021-22 <mark>to</mark> 2025-26.
	approved mining plan.	The opencast me	ethod of mining shall be
	Accordingly, the Project	continued with roc	k breaker and excavator-
	Proponent needs to devise the	tipper combination	. The Broad parameters of
	site specific mitigation measures	mining operation v	vill be as below:
	for environment attributes.	Number of	300 days/year
		Working	1 day shift
		shift/day	r day shint
	e-Pav	Working	3 no.
		benches	
		Bench Height	3.0m (max.)
		Width	For running bench
			10m
			For ultimate bench
		Demokrata (2./5m max.
		Bench slope	>ɔɔ`

SI.	ADS Point	Response by Project Proponent
No.		
		Ultimate Pit 45°
		slope
		Drilling and Blasting shall be practiced very
		rarely as and when hard strata will be
		encountered, however since the year 2014,
		no blasting has been done. Detail of Blasting
		Pattern, as per the approved mine plan has
	VC	been submitted.
	2-14	The site specific mitigation measures of
		environment attributes are provided in EIA
		report.
3.	The Project Proponent needs to	The detailed plantation under greenbelt
	specifically define the area	development along roads and in non-
	developed under greenbelt, along	mineralized area, no. of saplings planted
	roads and in non-mineralized	under each area and their survival rate and
	area, no. of saplings planted	budget spent towards the same with
	under each area and their survival	supporting documents has been submitted.
	rate and budget spent towards the	Further, GMDC will make all necessary
	same with supporting documents.	with good suprival rate
		with good survival rate.
4	The Project Proponent needs to	Project proponent had submitted the action
	submit the closure report w.r.t.	plan for green belt development along with
	areenbelt issued by the Regional	budgetary expenditure and timeline to the
	Office, MoEF&CC.	IRO, MOEFCC – Gandhinagar.
	PC	CDEEN
		The closure report from IRO, MoEFCC -
		Gandhinagar received on 27th February
		2024 and has been submitted.
5.	The Project Proponent needs to	The precise, actionable and monitorable
	submit the more precise,	plan for the activities proposed under
	actionable and monitorable plan	community development in year 2024-25
	for activities proposed under	has been submitted.
	community development along	
	with timeline.	
6.	The Project Proponent needs to	The letter from the office of Deputy
	submit the letter from the State	Conservator of Forests (DCF), Kutch West
	Forest Dept. regarding the	Forest Dept. (State Forest Dept. – Bhuj
	location of National Park, Wildlife	received on 05/03/2024 vide letter no.

SI.	ADS Point		Response by Project Proponent
No.			
	Sanctuary,	ESZ/ESA,	C/JMN/Te.11/530/23-24. It is informed that
	Tiger/Elephant	Reserves,	there is no National Park, Wildlife Sanctuary,
	Corridors etc., within 1	0 km radius	ESZ/ESA, Tiger/Elephant Reserves,
	of the study area.		Corridors etc., within 10 km radius of the
			Mothala Balachod Bauxite Mining Project.
			However, the nearest Eco Sensitive Zone
			(ESZ) of Kutch Bustard Sanctuary is at 8.5
			Kms from the project site. The letter has
		k_{LC}	been submitted.

viv.	Dotaila of the	Environment	Management	Dlan	
XIX.	Details of the	Environment	Management	Plan	
					(/

Sr. No.	Description	Existing Recurring	Proposed Co Lacs	ost (Rs. In s)	Justification for Additional Cost
	K12	Cost Per Annum (Rs. In Lacs)	Capital	Recurring	Ð
1	Air pollution Control	3.00	10.00	0.50	Additional installation of water sprinklers
2	Water Pollution Control	0.50	5.00	1.00	Garland drain, Retaining wall & Siltation tank
3	Environment Monitoring and Management	1.00	30.00 (considering online AAQMS)	10.00	Installation of weather station; Noise meter & 1 pair of RDS & FPS & its annual maintenance and regular Environmental Monitoring
4	Wired Fencing	1.50	-	-	NA
5	Noise Pollution Control	0.50	-	-	

Sr. No.	Description	Existing Recurring	Proposed Co Lacs	ost (Rs. In s)	Justification for Additional Cost
		Cost Per Annum (Rs. In Lacs)	Capital	Recurring	
6	Occupational Health	1.00	2.00	0.70	Implementation of Covid 19 as per the directive of Govt. of India for Employees
7	G <mark>reen</mark> Belt	4.00	6.00	4.00	Plantation
8	Drinking Water	1.50	0.50	0.20	Additional water filtration system.
	Total	13.00	53.50	16.40	
	Grand Total		53.50	29.40	Total Recurring cost represent existing and proposed
9	Cost For CSR Ac income for CSR	ctivity: Project F (Corporate So	Proponent will s cial Responsibi	pend amour lities).	nt of <mark>2</mark> % of their gross

xx. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Capital Cost for Environment Protection	Capital Cost 53.50 Lakhs
84	Recurring Cost 29.40 Lakhs
Budget for addressing the Public	The precise, actionable and monitorable plan
Hearing issues	for the activities proposed under community
e-Pav	development in year 2024-25 is of Rs.
	1845000
Total Cost for EMP	Rs. 71.95 Lakhs (Capital cost of Env.
	Protection and Need based Socio-economic
	survey)
Recurring Cost for EMP	29.40 lakhs
Project Cost	60 Lakhs
Employment	34 os.

3. Observation and Recommendation of the Committee:

The instant proposal is for Environmental Clearance under MoEF&CC Notification S.O.1530 (E) dated 6th April 2018. The Project Proponent was granted Terms of Reference (ToR) on 18.04.2022. The PP presented the reply of the ADS points that were raised vide minutes of the 26th EAC meeting held during 31st January 2024- 1st February 2024 and stated that earlier LoI was issued for mineral bauxite over an area of 299.4005 vide EC dated 08.12.2005. However, as per corrigendum vide letter dated 02.02.2007 issued by Industries & Mines Department, Govt of Gujarat, the mining lease area was amended from 299.40 to 280.7686 ha at the time of lease deed. The EAC also enquired about the current practice of mining, the PP replied that they are undertaking opencast method of mining with rock breaker and excavator-tipper combination. PP also informed that drilling and blasting shall be practiced very rarely as and when hard strata will be encountered, PP further mentioned that they have not undertaken any blasting since the year 2014. With regard to the ADS point on plantation, PP submitted the detailed plantation under greenbelt development along roads and in non-mineralized area. PP committed that they will make all necessary efforts to develop green belt more efficiently with good survival rate.

The EAC noted the plantation report submitted by PP and asked the reason for the poor survival of the plants. PP informed that poor survival rate has been observed due to harsh climatic conditions, erratic rainfall, poor soil quality and poor land topography. PP mentioned that as on dated total 4530 No of plants have survived covering an area of 4.34 ha. Species planted includes Melai Azadiracta, Prosopis cineraria, Acacia Senegal, Magnifera indica, Guava etc. The EAC asked the PP to engage institute of national repute having expertise in plantation in arid climate to enhance the survival of the planted species. With regard to presence of Bustard, PP informed that as per DCF letter dated 5.03.2024, there are no national park, wildlife sanctuary, ESA/ESA present within 10 km radius of the Mothala Balachod Bauxite Mine. However, the nearest ESZ of Kutch Bustard Sanctuary is at a distance of 8.5 kms from the project site. The EAC advised the Project Proponent to adopt and implement protection and mitigation measures for conservation of Great Indian Bustard. The EAC also asked the PP to increase the plantation of short grasses which are suitable for the hard ground available near to the Project area and simultaneously local species needs to be increased within/outside the ML area. The EAC also noted that PP has submitted the closure report dated 27.02.2024 from Regional Office of the Ministry located in Gandhinagar.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its 29th EAC (Non-Coal Mining) meeting held during 9-10th May, 2024 **recommended** the proposal under MoEF&CC Notification vide S.O. 1530(E) dated 6th April 2018 and as per the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance for Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686

Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

Specific conditions:

- i. The Project Proponent should install the Continuous Ambient Air Quality Monitoring Stations in such numbers as per the scientific study and in consultation with CPCB.
- ii. The real time data generated by continuous ambient air quality monitoring stations (CAAQMS) 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.
- iii. The Project Proponent should implement the budget of Rs 53.5 Lakhs as Capital cost and Rs. 29.40 Lakhs as recurring cost towards Environment Management Plan (EMP) within 3 years. The Project Proponent needs to submit the six-monthly report upon the progressive status of transportation of mineral through Rail and Road.
- iv. The Project Proponent shall strictly adhere to the action plan to monitor the movement of wildlife in the vicinity of the mine lease area.
- v. 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.
- vi. The Project Proponent needs to submit the annual compliance of the effectiveness of the Wildlife Conservation Plan from the Forest Department and submit it to the Regional Office of the Ministry.
- vii. Regular monitoring on surface water flow, turbidity & water quality shall be carried out and report shall be submitted quarterly to the Ministry's Integrated Regional Office.
- viii. 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.
- ix. Garland drains and catch drains shall be regularly desilted and maintained periodically at regular intervals.
- x. 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 occupational health shall be carried out 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.

- xi. The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area.
- xii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xiii. 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.
- xiv. 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 Regional Office. Project proponent shall use saplings of 10 ft height for plantation. PP shall make provision for drip irrigation to conserve the water.
- xv. 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.
- xvi. The Project Proponent shall provide the rainwater harvesting structure at mine office and quarters to recharge the ground water.
- xvii. 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.
- xviii. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable.
- xix. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- xx. The Project Proponent shall ensure that the protection and management of the water bodies should include provision of utilizing available water to the villagers by installing solar pumps as well as project proponent shall explore the possibility for installing floating solar panels for generation of electricity and distribution of power supply to the villagers.
- xxi. The Project Proponent shall install the adequate number of monitoring station to undertake air quality and water quality monitoring in the vicinity of 5 km of the mine and water bodies and the six monthly data should be submitted to the Ministry.
- xxii. 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.

- xxiii. The Project Proponent needs established water treatment facility for the drinking purposes within the ML area and submission of six-monthly report including the relevant photographs.
- xxiv. The Project Proponent needs to conduct the study w.r.t. the impact of mining upon Ground water for identifying status of PH and other parameters of ground water and submit a report to the RO, MoEF&CC within six-month.
- xxv. 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.
- xxvi. The Project Proponent should explore the possibility for shifting to clean energy using electric equipment for cleaner production options to reduce the emission generated from various machineries.
- xxvii. 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.
- xxviii. All the mitigation measures committed / envisaged in the EIA/EMP report and subsequent submission shall be implemented.
- xxix. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report
- xxx. 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 Regional Office.

2.2. Lakhpat & Punharajpur Lignite Block and Limestone mine for production capacity of 4.5 MTPA of Lignite and 29.81 MTPA of Limestone in the ML area of 2959.6715 ha by M/s Gujarat Mineral Development Corporation Limited located at Villages Lakhpat, Kaner & Punharajpur, Tehsil Lakhpat, District Kutch, Gujarat –

[Online Proposal No. IA/GJ/MIN/445103/2023, File No. IA-J-11015/29/2023-IA-II(NCM), EIA Consultant - M/s Centre for Envotech and Management Consultancy Pvt. Ltd.] - Reconsideration for Terms of Reference reg.

The instant proposal is for Terms of Reference for mining of Lignite and Limestone in Lakhpat & Punharajpur Lignite Block and Limestone mine for production capacity of 4.5 MTPA of Lignite and 29.81 MTPA of Limestone in the mine lease area of 2959.6715 ha by M/s Gujarat Mineral Development Corporation Limited located at Villages Lakhpat, Kaner & Punharajpur, Tehsil Lakhpat, District Kutch, Gujarat.

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

- The mine lease area is located between Latitude: 23°44'40.429"N to 23°49'19.872"N and Longitude: 68°43'22.983" E to 68°47'30.417" E. The mine lease area falls under the Survey of India Toposheet No: 41 A/9, 41 A/10, 41 A/13 & 41 A/14 and falls in Seismic Zone-V.
- 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. The Project Proponent has submitted that the Terms of Reference (ToR) was obtained on 22.06.2022 for Lakhpat & Punharajpur Lignite Block with production capacity 3.0/4.5 MTPA Lignite (Normative/Peak) & 29.81 MTPA Limestone in project area of 2959.6715 Ha. One of the specific condition (i) is that "as per the MoEF&CC's OM dated 24.12.2010, PP to apply the TOR separately for operation of Limestone mine to respective sector under the provisions of EIA, Notification for preparation of common EIA-EMP report". In view of the above, a fresh proposal has been submitted to obtain the Terms of Reference (ToR) for mining of Limestone.

S.no	Prospecting	Date of the	Name of	Period	Granted by	Mine lease
	License/	grant e-	the Mineral	of		area in Ha
	Letter of Intent		& (Major/	Grant		
	(Lol)/ Grant of		Minor)			
	Mine lease					
	and Lr No					
1.	Order No.	25.10.2021	Major	30	Industries	2959.6715
	MCR-102015-		Mineral	Year	and Mines	
	406-CHH1		(Limestone		Department	
	(Part File)		& Lignite)			

iv. Details of Mine Lease:

Sachivalaya,			
Gandhinagar,			

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

Private land	224.9142		
Government land	2734.7573		
Forest land	Not Applicable		
Total Mining lease area (MLA), ha	<mark>2959.6</mark> 715		
Private land for crusher, workshop	Nil		
& other infrastructure outside the			
MLA	2 A P		

vi. Details of Mining plan:

Mining Plan including Progressive Mine Closure Plan (approved by Indian	Letter No.	Limestone: MCDR - MPCP0CaFI/7/ 2023-GNR-IBM_RO_GNR Lignite: 55026-3-2020-MPS	
Bureau of Mines/DMG)	Date	Limestone: 09.08.2023 Lignite: 05.10.2020	
~	Mi <mark>neral &</mark> (Major/Minor)	Major	
	Mine Lease Area, Ha	2959.6715	
7	Validity	5 Yea <mark>r for Limestone</mark> .	
Mining Parameters	Quantitative Des	cription	
Methods of Mining	Mechanized O	pencast (The limestone bearing	
	overburden will be mined through Surface Miner while		
i i i i i i i i i i i i i i i i i i i	Lignite and other waste will be mined through shovel		
3	dumper combination.)		
Drilling/Blasting	Drilling and blasting will be rarely phenomenon in the		
	whole mining process throughout the life of the mine.		
92	Occasional drilling and blasting may require to		
	excavate the hard limestone strata which has been		
	reported in the Geological report. In case of drilling and		
	blasting, spacing and burdens will be limited to 5 meter		
	each. Deep hole blasting with SMS will be adopted.		
	Blasting will be done in the suitable time of the day after		
	proper intimation.		
Geological Reserves	Total Geological Reserve: Gross Geological Reserve -		
	161.59 Million Tonne and Net geological reserve -		
	145.43 Million Tonne for lignite		
	Total Geological Reserve: 736.58 Million Tonne of		
	Limestone		

Mineable Reserves	Lignite: 105.52 Million Tonnes		
	Limestone: 562.55 Million Tonnes		
Breakup of Total Excavation	Limestone - 29.81 MTPA		
(Topsoil/OB/SB/IB/Mineral	Lignite – 3 MTPA		
Rejects/ Waste, MTPA)	Top soil – 0.52 MTPA		
	OB – 118.7672 MTPA		
Life of mine	39 years (for Limestone 35 years and for Lignite 39		
	years) including one year of Pre-mining developmental		
	works.		
Mine Bench Height & Bench	Height of bench: 5m (max)		
Width	Width of bench: 10m (min)		
No. of Mine Benches	21		
Existing D <mark>epth, m</mark> bgl	-		
Ultimate Depth of Mining, m	Min: 21.92 m, Max: 115.31 m (Limestone)		
bgl	Min: 59 m, Max: 125 m (Lignite)		
Grou <mark>nd Water Table</mark> , m bgl	Core zone: The post-monsoon water level varies from		
S 2 2 '	1.5 m to 5 m below ground level. In the pre-monsoon		
	period, it varies from 3 m to 9 m below ground level.		
	Seasonal fluctuation in water level in these bore wells		
	in the core zone varies from 1.3 m to 3.8 m.		
	Buffer zone: The Post-monsoon water level varies		
	from 1.5 m to 6 m below ground level. In the pre-		
2	monsoon period, it varies from 3 m to 9 m below ground		
	level. Seasonal fluctuation in water level in these bore		
19	wells in the core zone varies from 1.3 m to 3.8 m.		
Details of ground water	The mining operation will be restricted to 100m depth		
intersection	from the surface level (RL). Depth of water table varies		
24	from 452 m to 651 m from surface level (RL). Hence,		
20.	there will be intersection of ground water aquifer during		
	mining operation. The detail hydrogeological study		
	does not envisage any impact due to puncturing the		
	aquifer in this mine. The ground water inflow has been		
	estimated in a tune of 283 MLD. This again will be		
	mitigated through groundwater recharge. Thus net		
	impact of Ground water depletion leading to		
	unavailability of the ground water is not envisaged.		
Individual bench slope	80°		
Overall pit slope	26°		
Details of existing/ proposed	Proposed Primary Crushing – Jaw Crusher of 6000		
Crusher	TPH capacity		
Mineral Beneficiation	Not Applicable		

Minutes of 29th EAC (NCM) during 9-10th May, 2024

113 | Page

RoM output size	-200 mm		
Transportation details	No. of Dumper of capacity 40 Ton -128 and		
including capacity of	No. of Dumper of capacity 35 Ton – 51		
dumper/tipper, mode of	Mode of transport – Road		
transport and distance	Distance – around 10 Km from project site		
	Transportation of Limestone is presumed in the vicinity		
	of 10 Km from the Mine, based on the response of		
	Limited RFP (Request for Proposal).		
	IC C		
e-N	Initially mineral will be transport through dumper via		
	road. Dumper Capacity for Limestone is 40 Ton.		
	Depending on the potential customers within the 10 Km		
	range, conveyor belt transportation will be planned.		
Generation of Topsoil/OB &	About 1249.34 M.cum of OB and 12.65 M.cum of		
its Management during plan	Topsoil will be generated. Backfilling will be done over		
period & conceptual period	1675.72 Ha out of which 717.93 Ha will be converted		
	to agricultural land and 957.79 Ha will be utilized for		
~	plantation.		
	The overburden, excluding the limestone, generated		
	during the mining process shall be utilized for		
Z	backfilling of the mined-out voids. Topsoil generated		
	during the mining process will be spread over the		
P 1	backfilled areas to make the dumping ground suitable		
C	for plantation and agricultural ground.		
Generation of Mineral	A mineral rejects yard will be created in the south-		
Rejects/ Waste & its	western corner of the Block to stack the sub-graded		
Manage <mark>ment during plan</mark>	limestone for future usage.		
period & conceptual period			
	The overburden, excluding the limestone, generated		
	during the mining process shall be utilized for		
	backfilling of the mined-out voids. Topsoil generated		
	during the mining process will be spread over the		
	backfilled areas to make the dumping ground suitable		
	for plantation and agricultural ground.		

vii. Water requirement:

Total water requirement	1325 KLD	Fresh water	50 M ³ /day
		Treated water	32 M ³ /day

Source	Groundwater 50M ³ /day, Dewatering water 814 M ³ /day & Mine pit rain water collection 461 M ³ /day.
	Deep tube wells will be installed at site for drinking water with necessary treatment plant. Potability of water will be analyzed in quarterly basis. In the initial years, water for dust suppression, plantation use and workshop uses will be catered from the mine pit water of nearby GMDC mines. With progress of the mine, accumulated pit water will be stored and utilized for the Plantation, Dust Suppression and workshop usage.
Permission for withdrawal/ intersection along with	Requisite approvals from CGWA will be obtained before commencement of mining operation.
details of grant and its validity	

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

Particulars	Particular's Name	Distance & Directions	
Village	Lakhpat	0.5 Km in N direction	
To <mark>wn</mark>	Nakhatrana	70 km in SW direction	
Highway	SH 42	Passing through the block	
Interstate Boundary	None within 10 km radius		
Railway Station/Railway	Naliya & Bhuj Railway	61 Km in southern direction	
line	Station	110 km in southeastern direction	
Water Bodies	 P1, Eastern side of Punharajpur village Check dam for Villagers. P2 Northern side of Punharajpur village Pond within the lease area. P3 NW side of Punharajpur village Pond within the lease area One Seasonal nallah (Tributary of Kali River) is passing within the 	Within Core Zone Within Core Zone	

	lease area. It will be	
	left undisturbed	
	during the mining	
	operation.	
	Kali Nadi	0.3 Km in W
	Kori Creek	3.3 Km in N
	 Korawadi Nadi 	6.3 Km in SE
	 Kapurasi Nadi 	9.7 Km in WSW
Forest	 Pranpar Rakhal RF 	1.9 Km in ESE
	Akri RF	6.7 Km in SE
2	Ukher RF	7.1 Km in E
	 Khanot RF 	8.5 Km in SSE
	 Mudhvay RF 	8.9 Km in SW
	Gaduli RF	9.8 Km in ESE

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/	Yes/No	Details of Certificate/letter issued by
En <mark>vironmental S</mark> ensitivity Zone		the concerned Department
		mentioning the Lr no, date of grant
		and remarks
Forest Land within the mine	No	No Forest land involved in the mine
le <mark>ase area and (</mark> if yes) status of		lease area.
Forest Clearance		a la construction de la construc
National Park	No	Narayan Sarovar Wildlife Sanctuary
	Box	approx. 8.8 km in SSW direction from
	rects if Sw	the Mine lease area.
Wildlife Sanctuary	No	Narayan Sarovar Wildlife Sanctuary
10/2	C GRE	approx. 8.8 km in SSW direction from
20.		the Mine lease area.
Elephant/Tiger Reserve	No	- 910
Eco-Sensitive Zone(ESZ) /Eco-	No	Eco- Sensitive Zone approx. 8.2 km
Sensitive Area (ESA)	Pavmen	from the Mine Lease area.
Coastal Regulation Zone (CRZ)	Yes	0.605 km from the block
Schedule-I species (No.s and	No	There is one wildlife sanctuary at a
name of schedule-I species with		distance of 8.8 km in the southern
authenticated letter)		direction from the block boundary.
		Site Specific Wildlife Conservation
		Plan has been prepared and
		submitted to concern authority.

Wildlife Conservation Plan	No	Site Specific Wildlife Conservation
		Plan has been prepared and
		submitted to competent authority.

x. Green belt/plantation details:

Proposed area for green belt/plantation and	Area: 1377.9 ha.
no. of saplings proposed	No. of Saplings: 34,44,750
Budget for green plant & plantation till the	45 Lakhs for first five year
end of life of mine.	
Budget for nursery	
Details of existing plantation and its survival	Survival Rate: 80%
rate	
No. of tree cuts in the mine lease area and	Detailed tree enumeration will be
compensatory afforestation	provided in EIA. CA not applicable.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	11.9 ha
One are health and a tank in the AOZZ O has the hifty	na ati a ci a 057 70 h a a n h a a h fillin n a 00 00

Greenbelt created in ha: 1377.9 ha., the bifurcation is 957.79 ha on backfilling, , 98.62 ha on stacks/ dumps, 308.19 ha on virgin land and lastly near utility services 13.30 ha including peripheral greenbelt.

717.93 ha will be developed for agriculture activities.

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro	geological study/ Traffic Study/ others)
Period of baseline data collection	March to May 2024
Season (Summer / Pre-monsoon / Post-	Summer Season
monsoon / Winter)	

xii. Rehabilitation & Resettlement (R&R):

R	&	R	There is no homestead PAF within the Block. However, there are 196 PAF
de	tails	5	and 798 PAP within the Block. Compensation in accordance with the
			prevailing Norm of State R & R Policy will be undertaken and implemented
			by M/s GMDC for the land losers.

xiii. Court case details:

Court Case,	No and its present	No court case is pending against the project.
status		

xiv. ADS details: Earlier, the proposal was considered in the 21st EAC (Non-Coal Mining) meeting held during 18-20th October, 2023 wherein the Committee has deferred the proposal for submitting additional information. The Project Proponent has submitted the following information vide letter dated 28.03.2024:

S.	ADS Point	Reply by Project Proponent
No		

1.	The Site visit report of the sub- committee	The Site visit report of the sub-committee has been submitted by the Project Proponent.
2.	Since the mine site is located within 20 km from seaboard frontier, Project Proponent shall submit No Objection Certificate from Ministry of Defence for consideration of the instant project for Terms of Reference (ToR).	Project Proponent had approached to Ministry of Defence, New Delhi for obtaining a No Objection Certificate. As per the Project Proponent's interaction with ASO (Policy & Planning), Ministry of Defence (MoD) (IAST: Rakshà Mantralaya), New Delhi. This proposal must be directly moved by MoEF&CC, New Delhi to MoD (IAST: Raksha Mantralaya), New Delhi being confidential in nature.
3.	The Project Proponent needs to clearly justify the water balance and also to explain that how the requirements of freshwater will be met.	The water requirement was initially 1940 KLD which has been reduced to 1325 KLD (reduction of 32% or 615 KLD) after carrying out comprehensive hydrogeological survey, ground water modelling and re-visiting the water balance. Water balance diagram has been submitted by the Project Proponent. As per the diagram the total water requirement is 1325 KLD which includes Ground water requirement (50m3/day), dewatering quantity (814 m3/day) and Mine pit rainwater collection 461 m3/day.

The Project Proponent has submitted the following point-wise reply w.r.t. the observations of site visit report of the sub-committee:

S.No.	Observation of the Sub-Committee	Reply by Project Proponent
1.	The PP shall submit the	• PP has provided comprehensive
	comprehensive material balance	material balance with regard to the
	with regard to the annual production	annual production of the both
	of the both minerals,	minerals, overburden/waste, top soil
	overburden/waste, top soil	generated, depth of mining,
	generated, depth of mining,	transportation of minerals mined out

	transportation of minerals mined out yearly, quantity to be stocked for the first five years. The excavation data should match when compared with the mining plan for both minerals i.e. Lignite as well as Limestone.	 yearly, quantity to be stocked for the first five years. The excavation data has been matched with mining plan for both the minerals. A detail of the same is has been submitted. Lignite: All mined out Lignite will be dispatched to the consumers for commercial use.
2.	The PP informed that they will by using SH 06 for transportation	Limestone: Initially, all the mined out Limestone will be stacked for the first five years. In the meantime, GMDC has invited EOI (Expression of Interest), to understand the interest of cement companies to utilize the limestone in the vicinity of the mine. Based on the response GMDC has rolled out Limited RFP (Request for Proposal) for the interested parties for their participation in Long-term Supply Agreement (LSA) for limestone.
	purpose along with NH 41, accordingly, PP shall submit the detailed transportation route for the proposed transportation of mined out minerals.	 Transportation of Limestone is presumed in the vicinity of 10 Km from the Mine, based on the response of Limited RFP (Request for Proposal). Depending on the potential customers within the 10 Km range, conveyor belt transportation will be planned.
3.	PP shall also undertake the carrying capacity study of the existing road to indicate its viability along with its pollution potential.	Details of the Carrying Capacity to be incorporated in the EIA Report, post finalization of the Long-term Supply Agreement (LSA) with potential consumers.

4.	The PP shall submit the detailed	• There are three pond within lease
	timeline for shifting the pond outside	area i.e. P1 P2 P3 Pond P1
	the mine lease area. The capacity of	Catchment area of 281250 m2 will
	the existing pond and the proposed	be used after 25th year during the
	pond along with its location needs to	mining operation and that will be a
	be provided by the PP	nart of 410 19 ha water body at the
		end of life of mine
		 Project proponent will not disturb P2
		 Project proponent will not disturb P2 8 P2 Pond during the mining
		a FS Folia during the mining
	NAC	operation.
	erv	As part of its CSR Activities, GMDC
		has initiated Development and
		Rejuvenation of check dam at
		Balyavo village under the Mission
		Amrit Sarovar with total
	a zat	administrative approval of Rs.
	S Q B	43,40,000/
	5 975	Ihe deepening of the Sanavala
		check dam on Khali river at Baiyavo
		village holds significant potential for
		enhancing the water needs of the
		residents in Baiyavo and Punrajpur
	2 C	villages. The check dam work is
		executed by the Office of Deputy
	Contraction of the second	Executive Engineer, Nakhatrana,
	orects of the	Kutch.
	3 Co-	The CSR project's execution
		promises to alleviate water scarcity
	96	in the region and ensure sustained
	· ~	socio-economic well-being for
		Baiyavo and Punrajpur villages in
	e-Payme	the Lakhpat Block.
5.	PP shall undertake green belt	Project proponent will develop greenbelt
	plantation alongside the lease	alongside the lease boundary and virgin
	boundary and virgin area plantation.	area. Around 30,000 plants will be
		planted in first five years during the
		mining operation. Details is given below:

		Yea	rGreen	Area	Number	Expe	Estimate
			belt	propo	of	cted	d
			locati	sed	plants	Surv	Expendit
			on	to be	propose	ival	ure
				cover	d	Rate	
				ed		(%)	
						. ,	
				(Ha)			
		1st	Safety	2.4	6000	80%	900000
	JVC		Zone				
	e ^{-N}						
		2nd	Safety	2.4	6000	80%	900000
			Zone				
	R. I.V	3rd	Safety	2.4	6000	80%	900000
	3 0 m R 240	10	Zone	ふ			
		4th	Safety	2.4	6000	80%	900000
			Zone			ų v	
		5th	Safety	2.3	6000	80%	900000
			Zone	2			
	0	Tota	100	116	30000		450000
	C Totecte S	1010		11.0			100000
6.	PP shall also submit its action plan	• II	n order	to uti	l <mark>ize</mark> the l	imest	one from
	for mineral use in case it is unable to	EL	.akhpat	- Pun	harajpur	mine	e, GMDC
	set up its Cement plant within next 5	h	as in	vited	EOI (E	xpre	ssion of
	years.	h	nterest), to u	nderstar	nd the	e interest
		C	of ceme	ent co	mpanies	to u	tilize the
	e-Dourse	li	mestor	ne in tl	ne vicinit	y of tl	he mine.
	- rayme	Base	ed on	the r	esponse	e, GN	IDC has
		rolle	d out	Limite	ed RFP	(Rec	quest for
		Prop	osal) f	or the	e interes	ted p	arties for
		their	partici	patior	in Long	g- terr	n Supply
		Agre	ement	(LSA)	for lime	stone).
7.	PP informed that mining activity will	•	P I	nad	appoin	ted	CGWA
	intersect ground water, accordingly	á	accredi	ted	consult	ant	Vardan
	PP shall undertake hydrological	I	Environ	et	(Certif	icate	No.
		(CGWA	′RGI/0	03) to	unde	ertake a

	study to determine whether any sea- water ingress will occur or not.	 Comprehensive Hydrogeological Report with ground water modelling. The detail Hydrogeological Modelling Study report concludes that possibility of sea water ingress
		is ruled out. Detailed Hydrogeological Study report has been submitted by the Project Proponent.
8.	PP shall obtain necessary permission/NoC from Archaeological Department for mining in the northern side of lease boundary that is in close vicinity to Lakhpat Fort.	 GMDC shall obtain the necessary permission/NoC from Archaeological Department for mining in the northern side of lease boundary that is in close vicinity to Lakhpat Fort. The application process is initiated. Project proponent will submit the necessary permission/NOC at the time
	× / / ~	of submission of EIA Report.

- xv. Change of Environmental Consultant: The Project Proponent vide letter dated 11.03.2024 requested to the MoEF&CC for change of Environmental Consultant from M/s Centre for Envotech and Management Consultancy Pvt. Ltd. to M/s Vardan Environet.
- xvi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Proje <mark>ct Cos</mark> t	Rs. 1037.436 Crores
Employment (No.s)	1000

3. Observation and Recommendation of the Committee:

The project proponent after explaining the site features on the KML presented the reply of the ADS points raised during the 21st EAC Meeting held during 18-20 October 2023. PP also provided the point wise compliance of the site visit report of the subcommittee. Upon submission of the reply by PP, the EAC asked the PP whether they have finalized the transportation route for the mined out mineral. PP stated that transportation of Limestone is presumed in the vicinity of 10 Km from the Mine, based on the response of Limited RFP (Request for Proposal). EAC was of the opinion that PP should atleast include the most probable route that it may follow for transportation in the EIA/EMP along with the carrying capacity study. Further, EAC observed that plantation proposed by the PP was inadequate and accordingly, the committee advised the PP to revisit their plantation programme by incorporating plantation of 2500 plants per hectare. EAC also noted that Lakhpat Fort is located near to the mine site and opined that PP shall seek no objection certificate from ASI in this regard. The EAC again reiterated that the mine lease is located within 20km from the seaboard frontier and as such PP needs to obtain the NoC from Ministry of Defence.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Limestone in Lakhpat & Punharajpur Lignite Block and Limestone mine for production capacity of 29.81 MTPA of Limestone in the ML area of 2959.6715 ha by M/s Gujarat Mineral Development Corporation Limited located at Villages Lakhpat, Kaner & Punharajpur, Tehsil Lakhpat, District Kutch, Gujarat under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions to be followed.

Specific Conditions:

- i. The ToR shall be granted upon the submission of the No Objection Certificate from Ministry of Defence.
- ii. The Project Proponent needs to submit the action plan for year wise backfilling.
- iii. The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.
- iv. The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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
- v. The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.
- vi. The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.
- vii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- viii. 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.
- ix. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- x. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xi. The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xii. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.
- xiii. The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.
- xiv. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF)/Project Displaced Families (PDF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. PP need to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. PP also needs to submit the possession certificate and timeline for acquiring the land. Further, PP needs to submit the map demarcating the purchased land and non-purchased land if any at the time of appraisal of EC.
- xv. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.
- xvi. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.

- xvii. PP shall submit no objection certificate for mining from ASI with regard to the Lakhpat Fort which is located at a distance of 200 m from the mine lease area in the northern direction.
- xviii. PP shall undertake the public hearing for Common EIA-EMP reports on both operations i.e lignite mine and limestone and submit the final EIA-EMP report to respective sectors simultaneously for their appraisal in accordance with the MoEF&CC OM dated 24.12.2010. Public Consultation, clearly indicating both the minerals Lignite as well as Limestone shall be conducted through the concerned SPCB as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal. All the issues should be incorporated in EIA along with its time bound action plan and budgetary provision. Also the issue raised in public hearing held earlier should also be addressed with time line action plan and budgetary provision in EIA/EMP report.
- xix. PP shall prepare a Plan for implementation of Continuous Automatic Air Quality Monitoring Station (CAAQMS) at mine site or its vicinity.
- xx. Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.
- xxi. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.
- xxii. The impact of mine operation on the river bodies flowing within the boundary of the mine with its mitigation measures adopted should be clearly spell in the EIA/EMP report with flood plain protection measures.
- xxiii. PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.
- xxiv. Project proponent to prepare Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
- xxv. The Project Proponent needs to undertake the enumeration of the plant species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area and also to explore the possibility of tree transplantation.
- xxvi. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.
- xxvii. PP shall provide the details of mining technology/methodology proposed to be adopted for Non-coal mining operations and its associated environmental benefits of using from Climate Change perspective.

- xxviii. PP shall submit letter from Principal Chief Conservator of Forest, State Government that the area does not falls under any authorized Elephants and Tiger corridors.
- xxix. The Project Proponent needs to submit the detailed scientific study on flora and fauna and also highlight the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
- xxx. PP shall submit the action plan to adhere the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
- xxxi. PP to submit the status of any pending court cases or disposed of cases pending before different adjudicating authority related to the present project/ mine site.
- xxxii. PP shall prepare a wildlife conservation plan in consultation with the local forest department focusing on the marine eco-system present at the mine site.
- xxxiii. The Project Proponent needs to submit the proof of the demarcation of the boundary pillars fixed on the ground.

2.3 DabaSaitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at DabaSaitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya - [Online Proposal No: IA/ML/MIN/449327/2023, File No. IA-J-11015/39/2023-IA. II(NCM), EIA Consultant - M/s Perfact Enviro Solutions Pvt Ltd] – Terms of Reference reg.

The instant proposal is for Terms of Reference for mining of Limestone in Daba Saitthad Limestone Deposit of M/s Star Cement Ltd with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha, located at Daba Saitthad (Wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site and hence the proposal falls under Category "A".
- The mine lease area is located between Latitude: 25°09'24.78" N to 25°09'39.43"
 N and Longitude: 92°21'29.53" E to 92°21'56.03" E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 (Restricted)and falls in Seismic Zone-V.
- iii. Details of Mine Lease:

S.No	Prospecting	Date of the	Name of	Period	Granted by	Mine
	License/ Letter of	grant	the Mineral	of		lease
	Intent (LoI)/ Grant		& (Major/	Grant		area
	of Mine lease and		Minor)			in Ha
	Lr No					
1	Prospecting	01.03.2023	Limestone	3	Mining &	25
	License-		(Major)	years	Geology	ha.
	MG.6/2023/33				Department,	
					Government	
					of Meghalaya	
2	Letter of Intent-	28.08.2023	Limestone	3	Mining &	25
	MG. <mark>6/2</mark> 023/277		(Major)	years	Geology	ha.
					Department,	
					Government	
		R	V E		of Meghalaya	
3	Lease Deed	12.02.2024	Limestone	50	Mining &	25
		A GET	(Major)	Years	Geology	ha.
		× 5°			De <mark>par</mark> tment,	
	\sim			· · · · ·	Gov <mark>er</mark> nment	
			- C 2		of Me <mark>g</mark> halaya	

S.	Details of grant of	Period of Grant		Name of the	Mine lease
No	Mine Lease deed	From To		Mineral	area in Ha
	execution		19		
1.	Mine Lease Deed	12.02.2024	11.02.2074	Limestone	25 ha
		ofects if	She 12	(Major)	

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

Private land	25 ha.
Government land	-
Forest land	Nil
Total Mining lease area (MLA), had a dy mente	25 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA
=	

v. Mining plan details:

Mining Plan(approved by	Letter No.	MCDR-MPCP0CaFI/10/2023-GUH-	
Indian Bureau of		IBM_RO_GUH	
Mines/DMG)	Date	11.12.2023	
	Mineral	Major	
	(Major/Minor)		
	Mine Lease	25	
	Area, Ha		
	Validity	5 years from the date of execution of	
		mining lease	
Mining Parameters	Quantitative De	escription	
Method of Mining	Opencast mec	hanized mining	
Drilling/Blasting	Deep hole drilli	ng & blasting.	
Geologic <mark>al Rese</mark> rves	52.44 million to	ons	
Mineabl <mark>e Reserves</mark>	40.89 million to	ons	
Breakup of Total	2.832 MTPA (ii	ncluding 2.51 MTPA of limestone, 0.322	
Excavation	MTPA of Wast	e/OB including topsoil).	
(To <mark>psoil/OB/SB/IB</mark> /Mineral	CELC.		
Rejects/Waste, MTPA)	7/		
Life of mine	50 Years [Max restricted to 2.! later stage of N	production of Lst (ROM) shall be 51 MTPA. Production from this mine at a /L may get reduced. Add <mark>iti</mark> onal	
	exploration shatthe reserves.]	all also be taken up which will increase	
Mine Bench Height &	The height of the	he bench will be 9 m and a minimum	
Bench Width	working width of safe operation	of the benches in mineral will be 18 m for of mining machinery.	
No. of Mine Benches	13	REEN	
Existing Depth, m bgl	NA, as it is a g	reen field project	
Ultimate Depth of Mining, m bgl	137		
Ground Water Table, m bgl	156	ents	
Details of ground water	Water table wil	I not be intersected as it is at 156 m bgl	
intersection	and mining will be done up to 137 m bgl.		
Individual bench slope	85° from horizontal		
Overall pit slope	<45°		
Details of existing/	There is no crusher proposed within the mining lease		
proposed	area. Limestone will be transported to the cement plant		
Crusher	crusher.		
Mineral Beneficiation	NA		

RoM output size	-1000 mm
Transportation details including capacity of dumper/tipper,	The material after blasting will be loaded by hydraulic excavators of about 2.6 m ³ bucket capacity into tippers of 25 tons carrying capacity for its transportation to
distance	dump inside mining lease.
Generation of Topsoil/OB & its Management during plan period & conceptual period	Max. 322,524.25 TPA of Waste/OB including topsoil will be generated. Waste/OB will be dumped temporarily at earmarked places. Later it will be used as blending material after taking permission from the Government. The topsoil generated will be used extensively for plantation.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	There will be no reject from the mine.

vi. Water requirement

Total water	40 KLD	Fresh water	<mark>0</mark> 5 KLD
requirement	2 13	Treated water	<mark>3</mark> 5 KLD
Source	Total water requirement for the proposed mine v		<mark>vi</mark> ll be around 40
0	KLD which will be sourced through water tankers from the		
	company's cement plant.		
Permission	Vide Letter No. AGRO/IRRI-110/96/2004-05/80 dated Shillong,		
3.	15th Sep 2004		
Additional	Total water requir	ement for the proposed mine v	vill be around 40
information(if any)	KLD, out of which 35 KLD will be STP treated water and 5 KLD		
	will be fresh wate	r for domestic purposes.	

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

Particulars	Particular's Name	Distance & Directions
Village	Lumshnong	1.95 Km NE
Town	Khliehriat	21.70 Km N
Highway	NH-6	0.57 km SE
Interstate Boundary	 India-Bangladesh 	9.08 km SSW
	International Boundary	
	 Meghalaya-Assam State 	12.88 Km SE
	Boundary	
Railway station	Hilara railway station	65 km (by road)
Water bodies	Um Badoh Stream	0.85 Km WNW
2	Lubha River	3.71 km SE
	Seshympa River	4.87 Km WSW
	WahLukha River	6.36 Km ENE
	ThangpyrshaidNala	6.60 Km N
	Sakha Nala	7.79 Km N
	KukhaNala	7.99 Km NE
5 0	KhaddumPieltleng Falls	8.37 Km ENE
	DongtangleNala	8.74 Km NNE
~	Prang River	9.16 Km <mark>W</mark> SW 👘
	RumplungNala	9.27 Km <mark>SW</mark>
	Natural swimming Pool	9.28 Km NE
	AphaNala	9.56 Km S
	Cher Fall	9.69 Km <mark>N</mark> E
	LarungNala	9.76 Km SW
9	SharaiNala	10.29 Km SW
Forest	Narpuh Reserve Forest	4.13 km SSW

viii. Presence of Environmentally Sensitive areas in the study area

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Forest Land/Protected	Yes/No	Details of Certificate/letter issued by the
Area/Environmental		concerned Department mentioning the Lr no,
Sensitivity Zone		date of grant and remarks
Forest land within the	No	Not Applicable
mine		
lease area and (if yes)		
status of		
Forest Clearance		
National Park	No	Not Applicable
Wildlife Sanctuary	Yes	Narpuh Wildlife Sanctuary - 3.90 km SE
Eco-Sensitive	Yes	Narpuh Wildlife Sanctuary ESZ - 2.70 km SE
Zone(ESZ) /Eco-		
Sensitive <mark>Area(</mark> ESA)		
Coastal Regulation Zone	No	Not Applicable
(CRZ)	L K	
Sche <mark>dule-I species (</mark> No.s	Yes	There are ten Schedule I Species found in the
and	1	buffer zone are given below:
na <mark>me of schedule</mark> -l	1 5%	Hoolockhoolock (Western hoolock gibbon),
sp <mark>ecies with</mark>		Nycticebusbengalensis(Slow loris),
au <mark>thenticated le</mark> tter)		Prionailurusbengalensis(Leopard Cat), Python
		molurus (Indian Rock Python), Neofelisnebulosa
		(Clouded Leopard), Bucerosbicornis (Great Pied
	3	Hornbill), Canis lupus pallipes (Indian
	2	Wolf), Manispentadactyla (Pangolin), and
P 1	C B	Melursusursinus(Sloth bear),
	10	Capricornissumatraensisthar (Himalayan serow).
Wildlife Conservation	Yes	The Chief Wildlife warden had a meeting with
Plan	~ P	Industries and Government departments for
		preparation of Regional Conservation plan for the
		East Jaintia Hills district under the supervision
		and guidance of CWLW, Meghalaya and the cost
	e-1	for preparation and implementation of the
		Regional Conservation Plan may be shared by
		various project proponents on a proportionate
		basis keeping in view the likely impacts of each
		project on the wild life and their habitat. Project
		proponent also confirmed that they shall be part
		of the regional conservation plan and will pay the
		fee as determined for project.

ix. Green belt/plantation details:

Proposed area for green	At the end of life of mine, out of the total 25 ha area,	
belt/plantation	20.12 ha will be used for Bench Plantation/	
	Grassification, 1.46 ha. along the 7.5 m wide peripheral	
	boundary will be developed to green belt.	
Budget for green plant &	Rs 1.03 Cr	
plantation till the end of life		
of mine.		
Budget for nursery	NA	
Details of existing	NA as it is greenfield project	
plantation and its survival	NC.	
rate		
No. of tree cuts in the mine	215 trees will be cut in the mine lease.	
lease are <mark>a and</mark>	Total about 37854 trees will be planted upto conceptual	
compensatory afforestation	period.	
Particulars for Green	Area covered (in Ha)	
belt/ <mark>plantation</mark>		
7.5 m barrier & non-	1.46 Ha	
mi <mark>neralized zon</mark> e		

x. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic			
Study/others			
Period of baseline data collection	March to May 2023		
Season (Summer / Pre-monsoon /	Summer Season		
Post- monsoon / Winter)			
Predominant Wind direction	Towards East		
(From)			
Ambient Air Quality (no. of	No. of locations- 06		
locations) and results	Results-Core zone: The mean value of PM10		
	ranges from (64.55 - 66.49 µg/m ³) & PM2.5		
	ranges from (29.20 - 30.08 µg/m³), SO2 ranges		
	from (6.15 - 6.33 µg/m ³), NO2 ranges from		
	(16.45 - 16.94 µg/m ³) & CO ranges from (0.29 -		
	0.30 mg/m3) which are within the limits of		
	National Ambient Air Quality Standards		
	(NAAQS). As per the Air Quality Index by CPCB,		
	the air quality of the core zone is found to be		
	Satisfactory in the Summer season.		
	Buffer zone: The mean value of PM10 ranges		
	from (69.07 - 75.53 µg/m ³), PM2.5 ranges from		
	(31.25 - 34.17 µg/m ³), SO2 ranges from (6.57 -		
	7.19 µg/m ³), NO2 ranges from (17.60 - 19.24		
	µg/m ³) & CO ranges from (0.31 - 0.34 mg/m3)		
	which are within the limits of National Ambient		
	Air Quality Standards (NAAQS). As per the Air		
	Quality Index by CPCB the air quality of the		
	buffer zone is found to be Satisfactory during the		
	sampling campaign.		

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Noise level (no. of locations) and	No. of locations- 08
results	Results- Core Zone (Industrial Area): N1 &
	N2: The ambient noise level during day time at
	the proposed project site varies from 57.4 dB (A)
	to 57.6 dB (A) which are within the standard limit
	of Industrial area ~ 75 dB (A). During night the
	noise level at the project site ranges from 44.7
	dB (A) to 44.8 dB (A) which are within the
	standard limit of Industrial area 70.0 dB (A).
	Buffer Zone:Residential Area: N5 to N8-The
-KYC	ambient noise level in residential areas ranges
	from 53.1 dB (A) - 56.6 dB (A) during day time
	and from 43.9 dB (A) to 47.2 dB (A) during night
	time. The slightly higher noise level compared to
	standard limit may be regarded to the residential
	and other local activities occurring within the
	village.
	Commercial Area:N3- Approach Road, N4-
	NH - 6 The ambient noise level in commercial
	area i.e.
	Approach Road & NH-6 is 57.4 dB (A) to 62.8 dB
	(A) during day time which is within the standard
3	limit of commercial area of $\sim 65 \text{ dB}$ (A) and 46.7
	dB (A) to 57.9 dB (A) during night time which is
5 S.	sugntly nigher than the standard limit of
	commercial area ~ 55 dB (A).

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Water Quality (no. of locations)	No. of GW locations- 08
and results	No. of SW locations- 04
	Results of GW-
	♦The Total Dissolved Solids (TDS) of the
	sampling locations W1, W2, W3, W4, W5, W6,
	W7, W8 ranges from 68 mg/l to182 mg/l which
	are within the drinking water standard (IS:10500)
	i.e. 500 mg/l.
	The Total Hardness of the sampling locations
JVNC	ranges from 18 mg/l to 70 mg/l which are within
e-N-	the drinking water standard (IS:10500) i.e. 200 mg/l.
	The Alkalinity of the sampling locations
	ranges from 13.80 mg/l to 61.60 mg/l which are
	within the drinking water standard (IS:10500) i.e. 200 mg/l.
S 2 8	The Fluoride content in the sampling locations
	ranges from <0.1 mg/l to 0.64 mg/l which are
	within the drinking water standard (IS:10500) i.e.
	1.0 mg/l.
	The Calcium Concentration of sampling
Z	locations ranges from 5.4 mg/l to 26 mg/l.
3	Calcium levels of sampling locations are within
6 29	the drinking water standards (IS:10500) i.e. 75
	mg/l.
	The Magnesium Concentration of sampling
10 A	locations ranges from 0.48 mg/l to 7.20 mg/l.
	Magnesium levels of sampling locations are
	within the drinking water standards (IS:10500)
e-1	Ine Chloride Concentration of all the
	sampling locations ranges from 6.80 mg/l to 31
	are within the drinking water standards
	(1S:10500) i e 250 mg/l
	Results of Surface Water-
	Surface water samples were derived from 4
	locations in different surface water bodies within
	study area, analysis results of the same
	revealed that pH values amongst all samples

varied in the range of 7.40 - 7.78, Total Hardness concentration varied in the range of 118 mg/l to 172 mg/l &, TDS concentration varied in the range of 201 to 252 mg/l. Electrical Conductivity was found to be ranging in between 352 to 432 mS/cm. The surface water samples falls under class D & E as per CPCB surface water criteria i.e. Water is suitable for Propagation of Wildlife and FisheriesSoil Quality (no. of locations) and resultsNo. of locations- 08 Results- Soil samples at location S1 - S8 shows that the soil texture class is Clay, Clay Loam, Colour is 5/3 Dull brown, pH range is (6.90 - 7.70). Amount of primary nutrients like Organic matter range is (0.35 - 2.31) %, the available nitrogen range is (62.40 - 106.40) mg/kg is Low and available Potassium range is (12.20 - 43.70) mg/kg is Low while the available Phosphorus range is (7.20 - 14.10) mg/kg is medium to high. Thus it can be concluded that soil is average fertile.Hydro geological study and resultsNot conductedTraffic study (no. of locations) and resultsNot conducted		
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	results	LOS of both locations -"A".

xi. Rehabilitation & Resettlement:

R & R details	The Project Proponent has submitted that
	the R&R is not involved in this project
	the rearches not involved in this project.

xii. Court case details:

Court Case, No and its present status	The Project Proponent has submitted that
Undertaking by Project Proponent w.r.t	there is no litigation pending against the
court case	project and/or land in which the project is
	proposed to be set up

xiii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM	The Project Proponent has submitted the
dated 30.05.2018	Affidavit dated 17.10.2023 stating that they
	commit to comply with order of the Hon'ble
	Supreme Court order dated 2 nd August 2017 in
	Writ Petition (Civil) No. 114 of 2014 in the matter
	of common cause versus Union of India & Ors.

xiv. ADS details: The proposal was considered in the 22nd EAC (Non-Coal Mining) meeting held during 14-15 November, 2023 wherein the Committee deferred the proposal for additional information. The Project Proponent vide letter dated 13.03.2024 submitted the information on Parivesh which is given as under:



S.No	ADS Point	Reply by project proponent		
i	The Project Proponent	The Project Proponent has submitted the NOC from		
	needs to submit the	the Ministry of Defence dated 05.04.2024.		
	NOC from the Ministry			
	of Defence.			
ii	The Project Proponent	The existing road is an approach for broom garden &		
	needs to submit the	a hamlet. After appraisal project proponent has		
	width of the public	changed the alignment of the road which is now		
	road.	passing through private land having agreement with		
		the owners for transportation of Limestone. The		
	oK	Project Proponent has submitted the Plan.		



iii	The Project Proponent	As advised, Limestone samples from Daba Saitthad
	needs to submit the	Limestone Deposit of 25.00 Ha Mining Lease Area of
	hardness of Limestone	Star Cement Limited were sent to Indian Institute of
	tested by a reputed	Technology (Indian School of Mines), Dhanbad for
	Institute.	determination of Moh's hardness along with
		Compressive strength, Tensile strength. Their
		recommendation are as under:
		"The results of Moh's hardness ranges from 3 to 5. In
		general, the Moh's hardness is an indirect measure of
		the tool consumption of the cutting machine, again this
	1.	is indicative of high tool consumption that may result
		into more downtime of the surface miner machine on
		account of tool change if deployed. Therefore, based
		on the test results it is recommended to avoid
		deployment of surface miner."
		"It is observed from the test results of UCS of rock
		samples of Dabba Saitthad Limestone Deposit of
		25.00 Ha Mining Lease Area of Star Cement Limited,
	<	that the compressive strength has an average value
		of $47.48 \pm 16.2 MPa$ (N/mm2) which is considered a
		high value for deployment of Continuous Miner as far
		as production capacity is considered (Kramadibrata,
	2	1996). At this value the surface miner will be
	3	producing at a very low and uneconomical rate."
		"Considering the test results of the tensile strength of
		the rock samples of Daba Saltthad Limestone Deposit
	3	of 25.00 Ha Mining Lease Area of Star Cement
	24	Limited, the average value is 25.95 ± 3.78 MPa. At this
	26 V	value of tensile strength, the deployment of Surface
	િ	deployment of surface miner is practically unsuitable
		beyond 6 MPa of tonsile strength of rock."
		The project proponent has requested EAC to refer
		nage no ii & iii- Executive summary of report from
		Indian Institute of Technology (Indian School of
		Mines) Dhanbad submitted to MoEF&CC
		The Project Proponent had procured Dozer with
		Ripper attachment for mining but it could not be used
		as Limestone is very hard & massive in nature. Thus
		equipment has not been utilized.

iv	The Project Proponent needs to explore the possibility of installing a fixed/ mobile crusher within the lease area.	The Project Proponent has examined the possibility of installing fixed/mobile crusher within the lease area & reply is as under: Mining lease area is only 25 Hectare, so as to conserve the mineral resource Crusher is located outside the mining lease area in the Cement plant premises. Common crushers will be operated at Cement plant for Limestone, received from other mining areas as well. The crushers will cater the requirement of Limestone from Lumshnong Limestone Mine (66.98 Ha ML area), Khub I- 4.96 ha ML &Khub II-4.70 ha ML, Wah-Pynkon Limestone Mine- II having 13.58 Ha ML area and DabaSaitthad Limestone Deposit having 25 Ha ML area. These crushers will cater the need of SCL cement plants. It also facilitates avoiding emissions at multiple locations.

xv. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Project Cost	Rs 37.30 crores
Emp <mark>loyment</mark>	99. 510

3. Observation and Recommendation of the EAC: -

The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 3.9 km, SE direction and its ESZ boundary is located at a distance of 2.7 km SE to the project site. The project proponent after explaining the site features on the KML presented the reply of the ADS points raised during the 22nd EAC Meeting held during 14-15 November 2023. PP stated that they have obtained the NoC from Ministry of Defence vide letter dated 05.04.2024. Further with regard to the use of surface miner PP stated that as advised by the EAC earlier they sent their limestone sample to Indian Institute of Technology (Indian School of Mines), Dhanbad for determination of Moh's hardness along with Compressive strength, Tensile strength. The recommendation of study is given as under:-

• The results of Moh's hardness ranges from 3 to 5. In general, the Moh's hardness is an indirect measure of the tool consumption of the cutting machine, again this is

indicative of high tool consumption that may result into more downtime of the surface miner machine on account of tool change if deployed. Therefore, based on the test results it is recommended to avoid deployment of surface miner."

- It is observed from the test results of UCS of rock samples of Dabba Saitthad Limestone Deposit of 25.00 Ha Mining Lease Area of Star Cement Limited, that the compressive strength has an average value of 47.48 ± 16.2 *MPa* (*N/mm2*) which is considered a high value for deployment of Continuous Miner as far as production capacity is considered (Kramadibrata, 1996). At this value the surface miner will be producing at a very low and uneconomical rate."
- Considering the test results of the tensile strength of the rock samples of Daba Saitthad Limestone Deposit of 25.00 Ha Mining Lease Area of Star Cement Limited, the average value is 25.95 ± 3.78 MPa. At this value of tensile strength, the deployment of Surface miner is ruled out. As can be seen that the deployment of surface miner is practically unsuitable beyond 6 MPa of tensile strength of rock."

Based on the aforesaid recommendation of Indian School of Mines Dhanbad, PP requested EAC to allow deep hole drilling & blasting. Further with regard to the possibility of installing fixed/mobile crusher PP stated that Mining lease area is only 25 Hectare, so as to conserve the mineral resource Crusher is located outside the mining lease area in the Cement plant premises. Common crushers will be operated at Cement plant for Limestone, received from other mining areas as well. The crushers will cater the requirement of Limestone from Lumshnong Limestone Mine (66.98 Ha ML area), Khub I-4.96 ha ML &Khub II-4.70 ha ML, Wah-Pynkon Limestone Mine- II having 13.58 Ha ML area and Daba Saitthad Limestone Deposit having 25 Ha ML area.

In view of the foregoing submission of PP, the EAC asked the PP about the possibility of transporting the ore through OLBC upto the highway, PP informed that they have approached the village head and community members for their consent for making an alternate road for transportation of mineral to completely avoid the village/public road. PP also presented the alternate route to the EAC

Based on the above, EAC **recommended** the proposal in the 29thEAC meeting held during 9-10th May, 2024 for Terms of Reference for Mining of Daba Saitthad Limestone Deposit with production capacity of 2.51 MTPA of Limestone in the mine lease area of 25 Ha by M/s Star Cement Ltd located at Daba Saitthad (wahlareng), Village Lumshnong, District East Jaintia Hills, Meghalaya under provisions of EIA Notification, 2006 and its amendments therein with following specific conditions in addition to the standard ToR conditions applicable for the non-coal mining projects-

- i. The Project Proponent needs to submit the action plan for year wise backfilling.
- ii. The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.

- iii. The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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
- iv. The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.
- v. The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.
- vi. 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. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- vii. 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.
- viii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.
- ix. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- x. The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xi. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.
- xii. The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type

of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.

- xiii. PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- xiv. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.
- xv. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- xvi. The Project Proponent needs to carry out the cumulative impact assessment showcasing the impact by considering all peripheral mining activities of the combined mine operation for area towards wildlife sanctuary.
- xvii. PP shall prepare a Plan for implementation of Continuous Automatic Air Quality Monitoring Station (CAAQMS) at mine site or its vicinity.
- xviii. Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.
- xix. Heavy metals including other parameters in surface water quality shall be analyzed and provided in EIA Report. Further, detailed mineralogical and chemical composition of the mineral and percentage of free silica in Air quality and other parameters Arsenic, Lead shall also be analyzed in ambient air quality & to be furnished in EIA/EMP report.
- xx. The PP while carrying out base line monitoring should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should also submit the original Lab reports of air, water, soil and noise quality and NABL/MoEF&CC certificates of the respective laboratory.
- xxi. PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs.
- xxii. PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.
- xxiii. The PP shall submit an action plan for prevention of landslide and rollouts from the surrounding hillocks, inter alia, including plantation, cribs and gabbions, etc.

- xxiv. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.
- xxv. PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- xxvi. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- xxvii. PP should submit the detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory.
- xxviii. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants and it should be clearly mentioned. The input parameters used for the modeling also needs to be submitted in the EIA/EMP report.
- xxix. The project proponent needs to carry out the study to identify the species including the Schedule-I species as per Wildlife Act 2022 and prepare the wildlife conservation plan for the available Schedule- I species. The wildlife conservation plan should cover the impact of mining.
- xxx. The project proponent needs to carry out the Vibration study and submit the impacts of vibration during blasting in the EIA report. Effective measures should be taken to prevent the damage due to fly rock and its impact on the nearby Lumshnong village. Blasting activity shouldn't cause damage to the nearby villages.
- xxxi. 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 with a timeline for the concerns of the local people in terms of Education, Health-care and Environment.
- xxxii. The Project Proponent mentioned a school is at the distance of 1.5 Km from the mine lease area. Therefore, the PP shall ensure safety of the school and also mention for betterment of schools and to facilitate the online education system by providing Wi-Fi connectivity, smart classrooms and desktops/tablets, infrastructure, and environment protection.

- xxxiii. The impact of earthquake on the mining operation vis-à-vis Safety for the mine be delineated in the EIA report.
- xxxiv. Since the mine is on the slope, the hydro-geological study including water &its impact of stream on mine & vice versa to be included in the EIA report.
- xxxv. PP should submit an undertaking by way of affidavit as per Ministry's O.M No 3-50/2017-IA. II(M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 passed in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

2.4 Brishyrnot Limestone Deposit-II with total excavation of 3.58 MTPA (3.0 MTPA of Limestone, 0.2 MTPA of Shale, 0.38 MTPA of Waste/OB including Soil in the ML area of 65 ha by M/s Star Cement Meghalaya Limited located at Village Brishyrnot, Tehsil Khliehriat, District East Jaintia Hills, Meghalaya [Online Proposal No. IA/ML/MIN/456863/2023, File No. IA-J-11015/17/2019-IA-II(NCM), EIA Consultant - M/s Perfact Enviro Solutions Pvt Ltd] - Terms of Reference reg.

The instant proposal is for Terms of Reference for Brishyrnot Limestone Deposit-II of M/s Star Cement Meghalaya Limited with proposed maximum production capacity of 3.2 MTPA (Limestone: 3.0 MTPA & Shale: 0.2 MTPA), 0.38 MTPA of Waste/OB including Soil (Total excavation: 3.58 MTPA) in the mine lease area of 65 ha, located at Village: Brishyrnot, Tehsil: Khliehriat, District: East Jaintia Hills, Meghalaya.

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

- i. The project activity is listed at schedule no. 1(a) Mining of Minerals. The instant proposal attracts the general conditions as Narpuh Wildlife Sanctuary boundary is located at a distance of 1342 m, SE direction and it's ESZ boundary at a distance of 25.29 m, SE to the project site and falls under Category "A" of the schedule of the EIA Notification, 2006 and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 25°09'51.010"N to 25°10' 18.600" N and Longitude:92°25' 09.717 "E to 92°25' 55.894"E. The mine lease area falls under the Survey of India Toposheet No: 83C/8 (Restricted)and falls in Seismic Zone V.
- iii. Details of Mine Lease:

S.N	Prospecting	Date	of	the	Name	of	Perio	Granted by	Mine
0	License/ Letter of	grant			the		d of		leas
	Intent (LoI)/ Grant				Mineral	&	Grant		е
	of Mine lease and								area
	Lr No								in Ha

145 | Page

			(Major/ Minor)			
1	Prospecting	Granted on	Limeston	3	Minina &	65
	License-	12/04/2023/an	e & Shale	vears	Geology	ha.
	MG.8/2023/36	d executed on	(Major)	,	Department	
		08/05/2023			,	
					Governmen	
		Nr.		Ca .	t of	
				22	Meghalaya	
2	Letter of	22.09.2023	Limeston	3	Mining &	65
	Intent/authorizatio	IN	e & Shale	years	Geology	ha.
	n order-	a l	(Major)		Department	
	MG.8/2023/376		~ 5		,	
		V 8.20	A PA		Governmen	
			182	~~	t of	
	\geq				<mark>Me</mark> ghalaya	

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

Private land	65 ha.
Government land	Nil
Forest land	Nil
Tot <mark>al Mining lease</mark> area (MLA), ha	65 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	NA

v. Mining plan details:

-Payments

Mining Plan(approved by	Letter No.	MCDR-MPCP0CaFI/11/2023-	
Indian Bureau of Mines/DMG)		GUH-IBM_RO_GUH	
	Date	05.02.2024	
	Mineral	Major	
	(Major/Minor)		
	Mine Lease	65	
	Area, Ha		
	Validity	5 year from the date of execution	
		of mining lease	
Mining Parameters	Quantitative Desc	ription	
Method of Mining	Opencast mechar	nized mining using HEMM	
Drilling/Blasting	Deep hole drilling	& blasting.	
Geologic <mark>al Rese</mark> rves	138.15 million tor	ns of Limestone and 0.861 million	
	tons of shale		
Minea <mark>ble Reserves</mark>	111.20 million tor	ns of Limestone and 0.698 million	
	tons of shale		
Breakup of Total Excavation	3.58 MTPA (inclue	ding 3.0 MTPA of limestone, 0.2	
(To <mark>psoil/OB/SB/I</mark> B/Mineral	MTPA of shale, 0.38 MTPA of waste/OB including		
Rejects/Waste, MTPA)	soil).		
Li <mark>fe of mine</mark>	The life of mine	is estimated at about 38 years	
	considering the m	ineable reserves based on present	
	exploration.		
Mine Bench Height & Bench	The height of the	bench will be 9 m and a minimum	
Width	working width of the	he benches in minerals will be 20 m	
	for safe operation	of mining machinery.	
No. of Mine Benches	24	8	
Existing Depth, m bgl	NA, as it is a gree	n field project	
Ultimate Depth of Mining, m RL	70		
Ground Water Table, m RL	55	940	
Details of ground water	Water table will no	ot be intersected as it is at 55 mRL	
intersection	and mining will be	done up to 70 mRL.	
Individual bench slope	85° from horizonta	al	
Overall pit slope	<45°		
Details of existing/ proposed	No crushing and screening plant is proposed		
Crusher	mine. Limestone	& shale will be transported to	
	cement plant crus	her of 1200 TPH capacity.	
Mineral Beneficiation	NA		
RoM output size	-1000 mm		

Transportation details including	The material after blasting will be loaded by hydraulic
capacity of dumper/tipper,	excavators of about 2.6 m3 bucket capacity into
mode of transport and	tippers of 25 tons carrying capacity for its
distance.	transportation to crusher and waste dump yards.
Generation of Topsoil/OB & its	Max. 0.28 MTPA of waste & 0.1 MTPA of soil will be
Management during plan	generated. Waste/OB will be dumped at earmarked
period & conceptual period	places. The soil generated will be used extensively
	for plantation.
	About 3.332 million tons of Waste and 0.245 million
	tons of soil will be generated upto the life of mine.
-K1	Waste will be stacked separately in the temporary
	dump. The entire waste will be used in the cement
	plant as blending material after taking the permission
	from the government.
Generation of Mineral Rejects/	There will be no rejection from the mine.
Wast <mark>e & its M</mark> anagement	
duri <mark>ng plan </mark> period &	A RUNT PA
con <mark>ceptual perio</mark> d	

vi. Water requirement

T <mark>otal water requ</mark> irement		Fresh water	05 KLD
	45 KLD	Treated water	40 KLD
Source	Total water req	uirement for the proposed m	ine will be
	around 45 KLE	D which will be sourced thro	ugh water
9	tankers from the	e company's cement plant.	
Permission	Vide Letter No.	AID (J) 223 / 2008-09/971 (dated 16th
	June 2009.		
Additional information(if	Total water req	uirement for the proposed m	ine will be
any)	around 45 KLD,	, out of which 40 KLD will be S	TP treated
	water and 5 k	KLD will be fresh water for	domestic
	purposes.	er	

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

Particulars	Particular's Name	Distance & Directions
Village	Brishyrnot	0.16 Km South
Town	Khliehriat	21.20 Km N
Highway	NH-6	2.53 km WNW
Interstate Boundary	Meghalaya-Assam State	8.15 km SE
	Boundary	
	India-Bangladesh	12.50 Km SW
	International Boundary	
Railway station	Hilara railway station	70 km (by road)
Water bodies	Um lunar	0.07 Km East
2	Lukha River	1.23 Km SE
	Lubha River	1.23 Km SE
	Um Talang	3.60 km SW
	Um Sangat	4.46 Km N
	Um Ronsong	4.48 Km ESE
	Um Badoh	5.74 Km WNW
	DongtangleNala	6.13 Km N
	KukhaNala	6.57 Km NNW
~	PongkoloNadi	7.07 Km <mark>E</mark> SE 🛛
	Ap <mark>haNa</mark> la	7.72 Km <mark>S</mark> SE
	ThangpyrshaidNala	7.81 Km <mark>NW</mark>
	KhunngoiNala	8.46 Km <mark>E</mark> SE
	Sakha Nala	8.61 Km <mark>N</mark> W
	Singlei River	8.98 Km ESE
<u>9</u>	RaphingdungNala	9.33 K <mark>m</mark> NE
	LunthangtangNala	9.86 Km SSE
	Who ThaniangNala	9.9 <mark>3 K</mark> m NNW
Forest	Narpuh Reserve Forest	8.82 km SW
2	Block I	e la

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected	Yes/No	Details of Certificate/letter issued by the
Area/Environmental		concerned Department mentioning the Lr no,
Sensitivity Zone		date of grant and remarks
Forest land within the	No	Not Applicable
mine		
lease area and (if yes)		
status of		
Forest Clearance		
National Park	No	Not Applicable
Wildlife Sanctuary	Yes	Narpuh Wildlife Sanctuary - 1342 m SE
Eco-Sensitive Zone(ESZ)	Yes	Narpuh Wildlife Sanctuary ESZ -25.29 m SE
/Eco-		
Sensitive <mark>Area(</mark> ESA)		
Coastal Regulation Zone	No	Not Applicable
(CRZ)	Y	
Sche <mark>dule-I species</mark> (No.s	Yes	There are ten Schedule I Species found in the
and 💦 🔨	1	buffer zone are given below:
na <mark>me of sc</mark> hedule-l	1 5%	Hoolockhoolock (Western hoolock gibbon),
sp <mark>ecies</mark> with		Nycticebusbengalensis (Slow loris),
authenticated letter)		Prionailurusbengalensis (Leopard Cat), Python
		molurus (Indian Rock Python), Neofelisnebulosa
		(Clouded Leopard), Bucerosbicornis (Great Pied
	3	Hornbill), Canis lupus pallipes (Indian Wolf),
	3	Manispentadactyla (Pangolin), Melursusursinus
9	· 3.	(Sloth bear) and Capricornissumatraensisthar
		(Himalayan serow).
Wildlife Conservation	Yes	The Chief Wildlife warden had a meeting with
Plan		Industries and Government departments for
		preparation of Regional Conservation plan for the
		East Jaintia Hills district under the supervision
		and guidance of CWLW, Meghalaya and the cost
	e-1	for preparation and implementation of the
		Regional Conservation Plan may be shared by
		various project proponents on a proportionate
		basis keeping in view the likely impacts of each
		project on the wild life and their habitat. Project
		proponent also confirmed that they shall be part
		of the regional conservation plan and will pay the
		fee as determined for project.

ix. Green belt/plantation details:

Proposed area for green belt/plantation	At the end of life of mine, out of the total 65 ha area, 52.52 ha mined out benches will be rehabilitated by plantation/grassification, 2.71 ha. along the 7.5 m wide peripheral boundary and 0.36 ha undisturbed area will be developed to green belt.
Budget for green plant &	Rs 2.91 Cr
plantation till the end of	
life of mine.	
Budget for nursery	NA
Details of existing	NA as it is greenfield project
plantation and its	
survival rate	
No. of tree cuts in the	150 trees will be cut in the mine lease.
mine <mark>lease area a</mark> nd	Total about 96959 trees will be planted upto conceptual
comp <mark>ensatory</mark>	period.
afforestation	
Particulars for Green	Area covered (in Ha)
be <mark>lt/plan</mark> tation	
7.5 m barrier & non-	2.71 Ha
m <mark>ineralized zon</mark> e	

x. Baseline detail:

Baseline Data (Air / Water / Noise /	Soil / Hydro geological study/ Traffic Study/others
Period of baseline data collection	March to May 2023
Season (Summer / Pre-monsoon /	Summer Season
Post- monsoon / Winter)	
Predominant Wind direction	Towards East
(From)	
Ambient Air Quality (no. of	No. of locations- 06
locations) and results	
	Results- Core zone: The mean value of PM10
KYL.	ranges from (59.27 - 61.11 µg/m ³) & PM2.5
	ranges from (26.51 - 27.33 µg/m ³), SO2 ranges
	from (5.28 - 5.44 µg/m ³), NO2 ranges from
	(14.82 - 15.28 µg/m ³) & CO ranges from (0.26 -
	0.27 mg/m3) which are within the limits of
	National Ambient Air Quality Standards
	(NAAQS). As per the Air Quality Index by CPCB,
S 2 2	the air quality of the core zone is found to be
5 7 9%	Satisfactory in the Summer season.
	Buffer zone: The mean value of PM10 ranges
	from $(64.77 - 75.53 \text{ µg/m}^3)$ PM2.5 ranges from
	$(28.97 - 34.17 \text{ µg/m}^3)$ SO2 ranges from (5.77 -
3	7.19 µg/m^3 NO2 ranges from (16.19 - 19.24
	$\mu_{\rm r}$ μ_{\rm
CA.	which are within the limits of National Ambient
	Air Quality Standarda (NAAQS), As say the Air
	All Quality Stanuarus (NAAQS). As per the All
10). P	Quality index by CPCB the air quality of the
	buffer zone is found to be Satisfactory during the
	sampling campaign.

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Noise level (no. of locations) and	No. of locations- 08
	Results- Core Zone (Industrial Area): N1 & N2: The ambient noise level during day time at the proposed project site varies from 52.60 dB (A) to 53.20 dB (A) which are within the standard limit of Industrial area ~ 75 dB (A). During night the noise level at the project site ranges from 44.40 dB (A) to 45.10 dB (A) which are within the standard limit of Industrial area 70.0 dB (A).
ens R R R	Buffer Zone: Residential Area: N4, N5, N7 & N8:-The ambient noise level during day time at the proposed project site varies from 52.10 dB (A) - 54.60 dB (A) which are within the standard limit of Residential area ~55 dB (A). During night the noise level at the project site ranges from 43.90 dB (A) to 47.20 dB (A) which is slightly higher noise level compared to the standard limit of Residential area 45 dB (A). It may be regarded as the residential and other local activities occurring within the village.
e compione	Commercial Area: N3 & N6: The ambient noise level in commercial area i.e. Approach Road & NH-6 is 53.40 dB (A) to 62.80 dB (A) during day time which is within the standard limit of commercial area of ~ 65 dB (A) and 44.80 dB (A) to 57.90 dB (A) during night time which is slightly higher noise level compared to the standard limit of commercial area ~ 55 dB (A).

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Water Quality (no. of locations)	No. of GW locations- 07
and results	No. of SW locations- 04
	Results of GW-
	The Total Dissolved Solids (TDS) of the all
	(W1 to W7) sampling locations ranges from 68
	mg/l to 182 mg/l which are within the drinking
	water standard (IS:10500) i.e. 500 mg/l.
	The Total Hardness of the sampling locations
	ranges from 18 mg/l to 70 mg/l which are within
JVN	the drinking water standard (IS:10500) i.e. 200
e-N	mg/l.
	The Alkalinity of the sampling locations
	ranges from 22 mg/l to 52 mg/l which are within
	the drinking water standard (IS:10500) i.e. 200
	mg/l.
	The Fluoride content in the sampling locations
	ranges from <0.1 mg/l to 0.64 mg/l which are
	within the drinking water standard (IS:10500) i.e.
	1.0 mg/l.
	 The Calcium Concentration of sampling
	locations ranges from 5.4 mg/l to 26 mg/l.
3	Calcium levels of sampling locations are within
	the drinking water standards (IS:10500) I.e. 75
	The Magnesium Concentration of compliant
	The Magnesium Concentration of sampling
	Magnesium levels of sampling locations are
24	within the drinking water standards (IS:10500)
20	i.e. 30 mg/l.
1 e	The Chloride Concentration of all the
	sampling locations ranges from 6 mg/l to 42
e-1	mg/l. Chloride levels of all the sampling locations
	are within the drinking water standards
	(IS:10500) i.e 250 mg/l.
	Results of Surface Water-
	Surface water samples were derived from 4
	locations in different surface water bodies within
	study area, analysis results of the same
	revealed that pH values amongst all samples
	varied in the range of 7.33 - 7.70, Total

е-КУС	Hardness concentration varied in the range of 92 mg/l to 172 mg/l &, TDS concentration varied in the range of 162 to 218 mg/l. Electrical Conductivity was found to be ranging in between 352 to 412 mS/cm. The surface water samples are falls under class C, D & E as per CPCB surface water criteria i.e. Drinking water source after conventional treatment and disinfection, Water is suitable for Propagation of Wildlife and Fisheries & Irrigation, Industrial Cooling, Controlled Waste disposal.
Soil Quality (no. of locations) and results	No. of locations- 08 Results- Soil samples at location S1 - S8 shows that the soil texture class is Clay, Clay Loam, Colour is 5/3 dull reddish, brown (3/4), (5/3) dark brown, (5/3) dull reddish, pH range is 6.87 - 7.70. Amount of primary nutrients like Organic matter range is (0.35 - 2.12) %, the available nitrogen range is (82.40 - 122.60) mg/kg is Low and available Potassium range is (12.20 - 41.20) mg/kg is Low while the available Phosphorus range is (8.60 - 19.10) mg/kg is Medium to high. Thus it can be concluded that soil is average fertile.
Traffic study (no. of locations) and results	2 Locations, LOS of both locations -"A".

xi. Rehabilitation & Resettlement:

R & R details	There is no habitation on the said land, hence, R&R is not applicable	

xii. Court case details:

Court Case, No and its present status	The Project Proponent reported that
Undertaking by Project Proponent w.r.t court case	there is no litigation pending against the project and/or land in which the project is proposed to be set up.

xiii. Affidavit/Undertaking details:

Affidavit as per	Ministry's	OM	The Project Proponent has submitted the
dated 30.05.2018			Affidavit in a nonjudicial stamp paper of Rs 10
			dated 26.12.2023 stating that the company
			undertakes by affidavit that they commit to
			comply with the order of the Hon'ble Supreme
			Court order dated 2nd August 2017 in Writ
			Petition (Civil) No. 114 of 2014 in the matter of
			common cause versus Union of India & Ors.

xiv. ADS details: The Proposal was earlier considered in the 26th EAC (Non-Coal Mining) meeting held during 31st January & 1st February, 2024 wherein the Committee has deferred the proposal for the submission of requisite information. The Project Proponent has submitted their reply vide letter dated 13.03.2024 are as follows:

S.No	Observation of EAC	Reply by project proponent
	The EAC opined that the Ministry may seek comments from the Eco- Sensitive Zone (ESZ) Division in the Ministry stating whether the instant mine lease area falls under Eco- Sensitive Zone or not.	Eco-Sensitive Zone (ESZ) Division of the Ministry referred to the Hon'ble Supreme Court of India orders dated 26.04.2023 and further clarification issued on 28.04.2023 by the Hon'ble Supreme Court in I.A No. 131377 of 2022 in W.P (C) 202 of 1995: T.N. Godavarman Thirumulpad Vs Uol&Ors., mining not only within ESZ, but also even if ESZ is less than 1.0 km, is strictly prohibited.
0111	ollence CPC	boundary and the Protected Area, vis-à-vis the mine location co-ordinates, it is difficult to assess specifically the distance of nearest mining activity from the nearest ESZ boundary.
2.	The EAC also asked the Project Proponent to submit a letter from the State Forest Dept. clearly stating that the mine lease area falls under Eco-Sensitive Zone or not.	After physical verification by the DFO (T) Division, it is certified that the said area of limestone mining of 65 ha is a non-forest land and is also not a part of any Reserve Forest/ Protected Forest/Community Reserve/Wildlife Corridor/ Biodiversity Heritage site/ Catchment area/sacred grooves and it is also outside the Narpuh Wildlife Sanctuary and its Eco Sensitive Zone. The letter dated 24.01.2023 has been submitted by the Project Proponent.

Based on the site inspection report of the DFO, Conservator of Forest (T), Office of the Principal Chief Conservator of Forest (HoFF), Department of Forests and Environment, Government of Meghalaya has also issued a letter dated 14.02.2023, clearly stating that the proposed site is not part of any forest land and does not fall within the Eco Sensitive Zone nor WL Sanctuary. Letter dated 14.02.2023 has been submitted by the Project Proponent.

The Project Proponent has obtained the Non-Forest Certificate issued by the Chief Conservator of Forest, Office of the Principal Chief Conservator of Forest (HoFF), Department of Forests and Environment, Government of Meghalaya on 30.03.2023 and same letter has been submitted by the Project Proponent.

As per the discussion held during the 26th EAC dated 31.01.2024, Project the again applied Proponent has to the Additional Principal Chief Conservator of Forest (T) for issuing clarification that the project land is outside the boundary of the notified Eco Sensitive Zone of Narpuh Wildlife Sanctuary vide letter no. SCML-65 ha/PCCF/2023-24, dated 01.02.2024. GIS Lab of the Office of the Principal Chief Conservator of Forest (HoFF), Department of Forests and Environment, Government of Meghalaya, Shillong has generated the map on the GPS Co-ordinates pertaining to the plot of 65 ha and has also certified that the said plot is outside the boundary of the notified Eco Sensitive Zone of Narpuh Wildlife Sanctuary. The Project Proponent information has received from the Conservator of Forests (T), Office of the Principal Chief Conservator of Forest (HoFF), Department of Forests and

Environment, Government of Meghalaya vide letter no. MFG.16/50/CMCL/Vol-III/16,676 dated 08.02.2024 which states that:

"As per the map and the report of Divisional Forest Officer, Jaintia (T) Division, Jowai depicting the same dated 24.01.2023, the boundary of limestone mining lease and prospecting license of 65 Ha at Brichyrnot village, ElakaNarpuh, East Jaintia Hills District as applied by M/s Star Cement Meghalaya Limited is located outside the boundary of the notified Eco-Sensitive Zone of Narpuh Wildlife Sanctuary."

Thus, on the basis of above information the Project Proponent informed that the land is at a distance of approx. 25.29 mtr from the Eco Sensitive Zone of Narpuh Wildlife Sanctuary and 1.342 km from the boundary of Narpuh Wildlife Sanctuary which is more than 1 km as per the Order of the Hon'ble Supreme Court of India.

The Project Proponent has requested to DFO for issuance of certificate confirming that the mining lease area measuring 65 ha land falls outside the notified Eco Sensitive Zone (ESZ) of Narpuh Wildlife Sanctuary vide letter no. SCML-65ha/DFO/2023-24 dated 01.02.2024.

DFO, Jaintia Hills Wildlife Division Jowai has issued a letter no. MWL/JH/299/Mining Plan/2022-23/2135 dated 1st March, 2024 supported by map mentioning that mining area of 65 ha is located at distance of 25.29m away from the boundary of the ESZ of Narpuh Wildlife Sanctuary and 1.342 km away from the boundary of Narpuh Wildlife sanctuary.

The Project Proponent informed that as per the kml file available on the Parivesh portal the status of this plot of land shows that:

	•	The project is outside the ESZ boundary
		of the Narpuh Wildlife Sanctuary.
	•	The Forest Clearance and Wildlife
		Clearance do not apply to this project
		which implies that the project is outside of
		the ESZ boundary.

xv. Detailsof project cost and employment:

Particulars	(Rs. In Lakhs)
Project Cost	Rs 33.96 crores
Employment	94

3. Observation and Recommendation of the Committee:

The instant proposal attracts the General conditions as the Narpuh Wildlife Sanctuary is located at a distance of 1342 m, SE direction and its ESZ boundary is located at a distance of 25.29 m SE to the project site. The project proponent after explaining the site features on the KML presented the reply of the ADS points raised during the 26th EAC Meeting held during 31st January & 1st February 2024. The EAC noted the comments of ESZ Division of the Ministry as well as the submission of PP with regard to the distance of the project site from the ESZ boundary based upon the DFO letter dated 24.01.2023 and CF letter dated 14.02.2023. The EAC also noted that the PP has obtained NoC from Ministry of Defence vide letter dated 05.04.2024.

Thereafter EAC enquired about the measures proposed by PP to protect the river flowing adjacent to mine site in the northern direction at located a distance of 0.07 Km. PP informed that they have designated the area upto 50 m towards the side of the river as a no mining zone. The EAC opined that the river should be protected and efforts should be made towards maintaining its originality. The EAC advised the PP to ensure that untreated water/effluent is not disbursed into the river stream at any point of mine operation. Adequate streams protection measures are to be taken by constructing embankment along the ML area near to the river. PP shall ensure that the natural flow of the river is maintained. The EAC also noted that PP intends to mine shale which is a minor mineral, accordingly, EAC asked the PP to submit the SEIAA approved DSR for shale. The EAC also suggested the PP to explore the possibility of installing a mobile crusher within the mine lease area and laying a OLBC to transport the mined ore instead of transporting it through a private road by dumpers/tippers.

Based on the above, EAC **recommended** the proposal in the 29th EAC meeting held during 9-10th May, 2024 for Terms of Reference for Brishyrnot Limestone Deposit-II with total excavation of 3.58 MTPA (3.0 MTPA of Limestone, 0.2 MTPA of Shale, 0.38
MTPA of Waste/OB including Soil in the ML area of 65 ha by M/s Star Cement Meghalaya Limited located at Village Brishyrnot, Tehsil Khliehriat, District East Jaintia Hills, Meghalaya under provisions of EIA Notification, 2006 and its amendments therein with following specific conditions in addition to the standard conditions applicable for non-coal mining projects:

Specific conditions:

- i. The project proponent needs to submit the SEIAA approved District Survey Report for Shale during submission of EC application.
- ii. The Project Proponent shall explore the possibility of installing fixed/mobile crusher within the ML Area
- iii. The Project Proponent shall explore the possibility of laying OLBC for transportation of the mined out material.
- iv. The Project Proponent needs to submit the action plan for year wise backfilling.
- v. The Project Proponent needs to submit the details of the year wise excavation and plan for the proposed exploration program.
- vi. The Project Proponent needs to submit the total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled and the management of topsoil and waste needs to be properly addressed in EIA/EMP report. The mineable 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
- vii. The Project Proponent needs to submit the Land Use/Land Pattern based on the mineral deposit.
- viii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area. The report of the said survey shall be submitted during the appraisal for EC.
- ix. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- x. The Project Proponent shall obtain the baseline data from the nearby existing industries and showcase the comparison between its baseline data with the others.
- 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 submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the centre on both sides of road, details of no. of

trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road and the carrying capacity of the road.

- xiii. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xiv. The Project Proponent shall prepare the scheme for mandatory recycle/re- use of water as specified by the Central Ground Water Authority for different category areas seeking NoC for ground water withdrawal and the shall submit as part of EIA/EMP report.
- xv. The Project Proponent needs to submit the engineering design for construction of retaining wall, garland drains, catch drains and siltation ponds along with the timeline.
- xvi. The Project Proponent needs to submit the greenbelt/afforestation development plan (2500 plants per ha) for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of saplings, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.
- xvii. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.
- xviii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- xix. PP should clearly bring out that what is the specific diesel consumption (Liters/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- xx. The Project Proponent needs to carry out the cumulative impact assessment showcasing the impact by considering all peripheral mining activities of the combined mine operation for area towards wildlife sanctuary.
- xxi. PP shall prepare a Plan for implementation of Continuous Automatic Air Quality Monitoring Station (CAAQMS) at mine site or its vicinity.
- xxii. Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be planned by the collection of air quality data. Monitoring location

for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.

- xxiii. Heavy metals including other parameters in surface water quality shall be analyzed and provided in EIA Report. Further, detailed mineralogical and chemical composition of the mineral and percentage of free silica in Air quality and other parameters Arsenic, Lead shall also be analyzed in ambient air quality & to be furnished in EIA/EMP report.
- xxiv. The PP while carrying out base line monitoring should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should also submit the original Lab reports of air, water, soil and noise quality and NABL/MoEF&CC certificates of the respective laboratory.
- xxv. PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs.
- xxvi. PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of Limestone.
- xxvii. The PP shall submit an action plan for prevention of landslide and rollouts from the surrounding hillocks, inter alia, including plantation, cribs and gabbions, etc.
- xxviii. Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.
- xxix. PP should submit the quantity of surface or ground water to be used for this project. The complete water balance cycle need to be submitted. In addition to this PP should submit a detailed plan for rain water harvesting measures to be taken. The PP should submit the year wise target for reduction in consumption of the ground/surface water by developing alternative source of water through rain water harvesting measures. The capital and recurring expenditure to be incurred needs to be submitted.
- xxx. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of person to be engaged for implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
- xxxi. PP should submit the year-wise, activity wise and time bound budget earmarked for EMP, occupational health surveillance & Corporate Environmental Responsibility needs to be submitted. The capital and recurring expenditure to be incurred needs to be submitted.
- xxxii. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants and it should be clearly

mentioned. The input parameters used for the modeling also needs to be submitted in the EIA/EMP report.

- xxxiii. The project proponent needs to carry out the study to identify the species including the Schedule-I species as per Wildlife Act and prepare the wildlife conservation plan for the available Schedule- I species. The wildlife conservation plan should cover the impact of mining.
- xxxiv. The project proponent needs to carry out the Vibration study and submit the impacts of vibration during blasting in the EIA report. Effective measures should be taken to prevent the damage due to fly rock and its impact on the nearby Lumshnong village. Blasting activity shouldn't cause damage to the nearby villages.
- xxxv. 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 with a timeline for the concerns of the local people in terms of Education, Health-care and Environment.
- xxxvi. The impact of earthquake on the mining operation vis-à-vis Safety for the mine be delineated in the EIA report.
- xxxvii. PP should submit an undertaking by way of affidavit as per Ministry's O.M No 3-50/2017-IA. II (M) dated 30.05.2018 to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 passed in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- xxxviii. PP should not divert any stream/nallah passing through the ML area or flowing adjacent to the ML area. PP shall ensure the natural flow is not affected and shall undertake upstream/downstream monitoring of flow and quality of water.

2.5 Hanamaneri Limestone Mine Block with total excavation of 6.13 MTPA (4.0 MTPA of Limestone, 1.0 MTPA of Intercalated Waste, 0.19 MTPA of Top Soil, 0.94 MTPA of Over Burden) along with installation of Crusher with screening capacity of 1300 TPH and OLBC Capacity of 1200 TPH of 14 km length in the ML area of 445.37 ha by M/s J K Cement Limited located at Villages Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluka Badami & Mudhol, District Bagalkot, Karnataka. [Online Proposal No. IA/KA/MIN/453560/2023, File No. J-11015/39/2022-IA-II(NCM), EIA Consultant - J. M. Environet Pvt. Ltd.] - For Environmental Clearance reg.

2.5.1 The Proposal for Environmental Clearance for Hanamaneri Limestone Mine Block with total excavation of 6.13 MTPA (4.0 MTPA of Limestone, 1.0 MTPA of Intercalated Waste, 0.19 MTPA of Top Soil, 0.94 MTPA of Over Burden) along with installation of Crusher with screening capacity of 1300 TPH and OLBC Capacity of 1200 TPH of 14 km length in the ML area of 445.37 ha by M/s J K Cement Limited located at Villages

Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluka Badami & Mudhol, District Bagalkot, Karnataka.

2.5.2 The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meetingare given as under: -

- i. The instant project activity is listed at schedule no. 1(a) Mining of Minerals, the project falls under Category "A" i.e. ML area greater than 250ha as per EIA Notification dated 14th September, 2006 as amended from time to time.
- ii. The mine lease area is located between Latitude 16° 08' 21.96"N to 16° 09' 57.63" N and Longitude 75° 23' 35.31" E to 75° 26' 02.58" E. The mine lease area falls under the Survey of India Toposheet No. for Core zone E43V7 and Buffer zone E43V7, E43V8 & E43V12 and falls in Seismic Zone-II as per IS:1893 (Part - I): 2002.
- iii. Details of Terms of Reference (ToR): The Project Proponent has obtained ToR on 23.12.2022 for Hanamaneri Limestone Mine Block (Area: 445.37 Ha) with Proposed Limestone Production Capacity: 4.0 MTPA, Intercalated Waste: 1.0 MTPA, Top Soil: 0.19 MTPA, Over Burden: 0.94 MTPA (Total Excavation: 6.13 MTPA) in the ML area of 445.37 ha by M/s JK Cement Limited along with installation of Crusher & Screening 1300 TPH and OLBC 1200 TPH with 14 km length located at Villages Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D., Taluka Badami & Mudhol, District Bagalkot, State Karnataka.

S.	Prospecting License/	Date of the	Name of	Period	Granted	Mine
No.	Letter of Intent (LoI)/	grant	the	of Grant	by	lease
	Grant of Mine lease	'Diects	Mineral &	111	/	area in
	and Lr No	Sec.	(Major/		20	Ha
	6	PC	Minor)		5	
1.	Letter of Intent for	31.12.2021	Limestone	Letter of	Govt. of	430 ha
	grant of mining lease			Intent is	Karnataka	
	vide letter No. DMG-			valid for		
	17012/20/20 <mark>21/20</mark> 21-	e-D		a period		
	22/9171 in pursuant	- rayi	nents	of 3		
	to Rule 10 (2) of the			years		
	Mineral (Auction)			from the		
	Rules, 2015			date of		
				its		
				issuance		
2.	Corrigendum to Lol	05.01.2022	Limestone	Letter of	Govt. of	445.37
	vide letter no.			Intent is	Karnataka	ha
	17012/20/2021/2021-			valid for		

iv. Details of Mine Lease:

S.	Prospecting License/	Date of the	Name of	Period	Granted	Mine
No.	Letter of Intent (LoI)/	grant	the	of Grant	by	lease
	Grant of Mine lease		Mineral &			area in
	and Lr No		(Major/			Ha
			Minor)			
	22/9321 w.r.t the			a period		
	extent of the			of 3		
	Hanamaneri Block			years		
	was mentioned as			from the		
	430 ha and it stands			date of		
	corrected as 445.37	κ		its		
	ha			issuance		

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

Private land	419.83		
Government land	25.54		
Fore <mark>st Land</mark>			
Total Mining lease area (MLA),	445.37		
Ha 🗧 🖌			
Private land for crusher,	No infrastructure is proposed outside the ML area		
workshop & other infrastructure	except an OLBC of Capacity 1200 TPH with 14 km		
ou <mark>tside the ML</mark> A	length from the Mine to Plant		

vi. Mining plan details:

	01					
Mining	Plan	including	Letter N	lo.	MP/MECH-	
Progressive Mine Closure Plan					01(KNT)/GOA/2022-23	
(ap <mark>provec</mark>	d by India	n Bureau of	Date	5	21.06.2022	
Mine <mark>s/D</mark> M	1G)		Mineral	&	Major	
			(Major/I	Minor)		
			Mine Le	ase Area,	445.37	5
			Ha			
			Validity		5 years	
Mining Pa	arameters	:	Quantitative Description			
Method of	f Mining		Openca	Opencast Mechanized Limestone Mine		
Drilling/Bl	asting		Drilling & Blasting Parameters			
			S. No.	Par	ticular	Details
			1.	Dia of Ho	le	115 mm
			2.	Burden		3.5 M
		3.	Spacing		4 M	
		4.	Depth of	the Hole	6 to 8.5 Mts	
		5.	Yield/Mtr.		84 to 112 Mtr	
			6.	Powder F	actor	9.5 Tonne/Kg

Minutes of 29th EAC (NCM) during 9-10th May, 2024

165 | Page

Geological Reserves	147.35 Million Tonnes
Mineable Reserves	69.37 Million Tonnes
Breakup of Total Excavation	Limestone: 4.0 Million TPA
(Topsoil/OB/SB/IB/Mineral	Top Soil: 0.19 Million TPA
Rejects/ Waste, MTPA)	Intercalated waste: 1.0 Million TPA
	Overburden: 0.94 Million TPA
	Total Excavation: 6.13 Million TPA
Life of mine	~21 years
Mine Bench Height & Bench	Bench height: 8 m
Width	Bench Width: 25 to 30 m
No. of Mine Benches	07
Plan period <mark>m</mark> bgl	533 m AMSL (36 m bgl)
Ultimate Depth of Mining, m bgl	519 m AMSL (50m bgl)
Ground Water Table, m bgl	Pre-Monsoon: 16.3-36.8m bgl (531.2 to 559.7m
	AMSL), Post-Monsoon: 15.2 to 35.8 m bgl (532.2 to
	560.8m AMSL)
Details of ground water	Groundwater will be intersected in 5 th year of mining
intersection	operation and permission will be obtained from
	KGWA before intersection
In <mark>dividual benc</mark> h slope	70°
O <mark>verall pit slope</mark>	45°
Details of existing/ proposed	Installation of Crusher & Screening Plant: 1300 TPH
Crusher	Capacity
Mineral Beneficiation	Nil
RoM output size	40 to 85 mm
Transportation details including	Initially, crushed limestone will be transported to its
capacity of dumper/tipper,	existing cement plant located at 15.5km distance by
mode of transport and distance	covered trucks/tippers via road & after 4th year
	crushed limestone will be transported via 14 km
	length of OLBC.
Generation of Topsoil/OB & its	Top Soil:
Management during plan	During the Plan Period 0.574 Million Tonnes
period & conceptual period.	(0.441 Million CuM) of top will be generated out of
	which 0.370 Million Tonnes (0.284 Million CuM) of
	top soil will be utilized for greenbelt/plantation &
	0.204 Million Tonnes (0.156 Million CuM) of top
	soil will be stored & later on same will be utilized
	for greenbelt/plantation.
	> At conceptual stage, 2.16 Million Tonnes (1.66
	Million CuM) of top soil will be generated & same
	will be utilized for greenbelt/plantation and for

	levelling of backfilling, formation of the bund along the safety zone of road, nallah & strengthening of haul roads.
e-KY	 Over Burden/Intercalated Waste: During the plan period 5.12 Million Tonnes of waste will be generated; out of which 3.47 Million Tonnes will be OB and 1.65 Million Tonnes will be Intercalated waste which will be temporarily dumped systematically by retreating manner covering an area of 14.69 ha. At Conceptual Stage 19.75 Million Tonnes of overburden/intercalated waste will be generated & same will be used for backfilling & formation of the bund along the safety zone of road, nallah, HT line & strengthening of haul roads.

vii. Water requiremer	nt 🕺		
Tot <mark>al wat</mark> er	150 KLD	Domestic	10 KLD
requirement		Dust Suppression/Greenbelt	105 KLD
		Greenbelt/Plantation	25 KLD
		Workshop	10 KLD
Source	Water will	be sourced from ground water or	abstraction
	structure		
Permission for The P		ct Proponent has obtained the pern	nission for
with <mark>drawa</mark> l/	withdrawal	of Ground water for 150 KLD from the	Karnataka
intersection along Ground V		ater Authority vide NOC No. KGWAN13	02760125,
with details of grant dated 11.		2.2023 and valid for 2 years from the	Date of its
and its validity	issuance.	C GREE!	

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

Particulars	Particular's Name	Directions	
Nearest Village	Kadarakoppa	~1.5 km in South	
		direction	
Nearest Town	Bagalkot	~20 km in East	
		direction	
Nearest State/National	SH - 44	0.13 km in NNW	
Highway		direction	
	SH -20	~ 2.5 km in West	
		direction	
	SH-34	~3.0 km in WSW	
		direction	

Railway Station/Railway	Bagalkot Railway Station	~28 km in NNE
line		direction
Water Bodies	Canal is passing thorugh the mine	
	area	
	One Nallah Hale halla is passing	
	through the mine area	
	Midchi Halla	~ 1.5 km in ENE
		direction
	Lokapur Halla	2.5 km in NE
	LANC.	direction
	Ghatprabha River	6.5 km in NW
		direction
	Kalaskoppa Lale	~ 8.0 km in ESE
		direction
	Hire Halla	~8.5 km in ENE
	N - AR	direction
S	Gondimada Halla	<mark>∼9.</mark> 5 km in ENE
	Y 5°	di <mark>re</mark> ction
Fo <mark>rest</mark>	Reserved Forest:	➤ ~1.0 km in WSW
	Reserved Forest	direction
	Reserved Forest	➤ ~1.75 km in NWN
	Reserved Forest	direction
	Reserved Forest	∼2.5 km in North
	Reserved Forest	direction
19 19 19 19 19 19 19 19 19 19 19 19 19 1	Reserved Forest	➤ ~3.5 km in NNW
	Reserved Forest	direction
3	Reserved Forest	➤ ~3.5 km in West
· · · · · · · · · · · · · · · · · · ·	Reserved Forest	direction
	Reserved Forest	≻ ~4.0 km in WSW
	Reserved Forest	direction
	Reserved Forest	➤ ~4.0 km in East
	Reserved Forest	direction
	Reserved Forest	➤ ~5.5 km in SE
	Reserved Forest	direction
		➤ ~6.0 km in SE
		direction
		➤ ~6.5 km in SE
		direction
		➤ ~6.5 km in ESE
		direction

		➤ ~8.5 km in SE direction
		➤ ~9.0 km in ENE
		direction
		≥~9.5 km in SE
		r ~9.5 km in SE
ix Presence of Env	ironmenta	ally Sensitive areas in the study area
Forest Land /	Yes/No	Details of Certificate/letter issued by the concerned
Protected Area /	100,110	Department mentioning the Lr no. date of grant and
Environmental	err	remarks
Sensitivity Zone		
Forest Land within	No	The Project Proponent has stated that no forest land
the mine lease area		involved in the proposed project area as per the letter
and (if yes) status of		issued by State DFO, Karnataka vide letter no.
Forest Clearance	0	PCCF/WL/D/CR-01/2022-23, dated 16.11.2023.
National Park	No	
Wildlife Sanctuary	No	
El <mark>ephant/Tiger</mark>	No	
R <mark>eserve</mark>		
Eco-Sensitive Zone	No	
(ESZ) /Eco-Sensitive	3	
Area (ESA)	3	
Coastal Regulation	No	Barrie Ster U
Zone (CRZ)		rects if She
Schedule-I species	Yes	09 Schedule I species viz. 04 Mammals (Canis
(No. s and name of		aureus) Jackal, (Canis Iupas) Indian Wolf, (Hystrix
schedule-I species	74	indica) Indian Porcupine, (Macaca radiata) Bonnet
with authenticated	2	macaque; 03 Reptiles (Daboia russelli) Russell's
letter)	Maria	viper, (<i>Naja naja</i>) Spectacled cobra, (<i>Varanus</i>
Wildlife Conservation	Yes	Dengalensis) Indian Monitor Lizard; and U2 Aviraunal
Pian		(Milvus migrans) Black kile, (Pavo cristatus) indian
		prepared and recommended by the DEO Vide letter
		no B2/GEL/IKCement/CR/2023-24/1948 on dated
		06.01.2024. Further the Conservation plan has been
		recommended by the CCF. Belgaum and forwarded
		to PCCF, Bangalore for further approval on
		07.02.2024.

x. Green belt/Plantation details: Proposed area for green belt/plantation and no. of saplings proposed 131.18 ha Budget for green plant & plantation till the end of life of mine. Rs. 655.90 Lakh Budget for nursery The company is already having well established 02 no (s), of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 15.5 km distance from the Proposed Limestone Mine Block. The saplings proposed for Greenbelt/ plantation will be sourced from these nurseries. Details of existing plantation and its survival rate Not Applicable as this is a proposed project No. of tree cuts in the mine lease area and compensatory afforestation Approx. 70 no. of trees will be cut due to the Proposed mining proposal. The company is proposing to plant 140 additional no. of saplings as Compensatory plantation. 7.5 m barrier & Non mineralized areas 8.52 Ha 50 m safety zone of nallah, roads, electric lines At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows:		Budget proposed for conservation Plan is Rs. 45				
x. Green belt/Plantation details: Proposed area for green belt/plantation and no. of saplings proposed 131.18 ha Budget for green plant & plantation till the end of life of mine. Rs. 655.90 Lakh Budget for nursery The company is already having well established 02 no (s). of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 15.5 km distance from the Proposed Limestone Mine Block. The saplings proposed for Greenbelt/ plantation will be sourced from these nurseries. Details of existing plantation and its survival rate Not Applicable as this is a proposed project No. of tree cuts in the mine lease area and ming proposal. The company is proposing to plant 140 additional no. of saplings as Compensatory plantation. Particulars for Green belt/plantation Area covered (in Ha) belt/plantation 8.52 Ha 50 m safety zone of nallah, roads, electric lines At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows: 1) Safety zone along Canal, Nallah & HT line: 44.43 ha, 3) Plantation on Overburden: 20 ha, 4) Bench Plantation: 20.39 ha, 5) Plantation on Soil dump: 32.50 ha, 6) Plantation along Infrastructure: 5.34 ha xi. Baseline detail		Lakh.				
Proposed area for green belt/plantation and no. of saplings proposed 131.18 ha Budget for green plant & life of mine. Rs. 655.90 Lakh Budget for nursery The company is already having well established 02 no (s). of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 15.5 km distance from the Proposed Limestone Mine Block. The saplings proposed for Greenbelt/ plantation will be sourced from these nurseries. Details of existing plantation and its survival rate Not Applicable as this is a proposed project No. of tree cuts in the mine lease area and compensatory afforestation Approx. 70 no. of trees will be cut due to the Proposed mining proposal. Particulars for Green belt/plantation Asc covered (in Ha) 60 m safety zone of nallah, roads, electric lines At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows: 	x. Green belt/Planta	tion details:				
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Budget for green plant & plantation till the end of life of mine. Rs. 655.90 Lakh Budget for nursery The company is already having well established 02 no (s). of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 15.5 km distance from the Proposed Limestone Mine Block. The saplings proposed for Greenbelt/ plantation will be sourced from these nurseries. Details of existing plantation and its survival rate Not Applicable as this is a proposed project No, of tree cuts in the mine lease area and compensatory afforestation Approx. 70 no. of trees will be cut due to the Proposed mining proposal. Particulars for Green belt/plantation Approx domenation and saplings as Compensatory plantation. 7.5 m barrier & Non mineralized areas Area covered (in Ha) 50 m safety zone of nallah, roads, electric lines At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows: 1) Safety zone along ML boundary: 8.52 ha, 2) Safety zone along ML boundary: 8.52 ha, 3) Plantation on Overburden: 20 ha, 4) Bench Plantation: 20.39 ha, 5) Plantation on Soil dump: 32.50 ha, 6) Plantation along Infrastructure: 5.34 ha 	of saplings proposed					
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life of mine.Image: Constraint of the second structure is a structure is structure is	plantation till the end	of				
Budget for nursery The company is already having well established 02 no (s). of nurseries in its Existing Integrated Cement Plant & Colony located at approx. 15.5 km distance from the Proposed Limestone Mine Block. The saplings proposed for Greenbelt/ plantation will be sourced from these nurseries. Details of existing plantation and its survival rate Not Applicable as this is a proposed project No. of tree cuts in the mine lease area and compensatory afforestation Approx. 70 no. of trees will be cut due to the Proposed mining proposal. The company is proposing to plant 140 additional no. of saplings as Compensatory plantation. The company is proposing to plant 140 additional no. of saplings as Compensatory plantation. 7.5 m barrier & Non mineralized areas 8.52 Ha 50 m safety zone of nallah, roads, electric lines At conceptual stage, Greenbelt & plantation will be developed will be carried out on 131.18 ha. Break-up given as follows: 1) Safety zone along ML boundary: 8.52 ha, 2) Safety zone along Canal, Nallah & HT line: 44.43 ha, 3) Plantation on Overburden: 20 ha, 4) Bench Plantation: 20.39 ha, 5) Plantation along Infrastructure: 5.34 ha xi. Baseline detail	life of mine.					
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Dasenne Data (An / Water / Noise / Son / Hydro yeological Study/ Hame Study/	Baseline Data (Air / Wa	Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/				

Season (Summer / Pre-monsoon / Post- Winter)	Post Monsoon Season		
Predominant Wind direction (From)		East	
Ambient Air Quality (no. of locations) an	d results	8	
Noise level (no. of locations) and results	5	8	
Water Quality (no. of locations) and resu	ults	8	
Soil Quality (no. of locations) and results	3	8	
Hydro geological study and results		Done	
Traffic study (no. of locations) and result	ts	Done	
xii. Public Hearing (PH) Details			
Advertisement for PH with date (name	"Deccan Herald	"& "Hosa Digantha" in	
of major national daily and one regional	English & Local I	anguage on 17.09.2023	
vernacular daily newspaper)	"Sanie Darshan" & "\/ijay Karnataka" in daily		
	Kannada Newspaper respectively on		
	20.09.2023 & 23	09.2023	
Date of PH	04.10.2023 at 11	:00 AM	
Venue	Project Site, Sv.	No. 68/2. Lokapur. Lokapur-	
	Bagalkot Road	(SH-44), Near Viraktamath	
	Petroleums, Mud	hol-Taluk, Bagalkot-District	
Chaired by	Smt. Janaki K.M.	, I.A.S.	
	Deputy Comm	issioner <mark>an</mark> d Chairman,	
Z (E)	Environmental F	Public Hea <mark>ri</mark> ng Committee,	
2	Bagalkote, Karna	itaka 📕	
Main issues raised during PH	Education, Employment, Environment, Health		
C Votec	care, Community	welfare and Development	
Budget proposed for addressing issues	Capital Cost: 186 Lakhs		
raised during PH over 3 years	CDEEN	5	

The Project Proponent has submitted the following action plan with item wise break up of Public Hearing budget as follows:

Particular	Proposed Physical Activities to be	Unit of Measurement					Budget	
	dulle	1 st Year		2 nd Year		3 rd Year		(Rs. In Lakh)
		Location /	Budget	Location /	Budget	Location / Area	Budget	
		Area		Area				
			(Rs. In		(Rs. In		(Rs. In	
			Lakh)		Lakh)		Lakh)	
Education &	Providing infrastructure to Govt.	Hanamaneri/	8	Jalikatti	6	Kadarkoppa/	6	20
Sports Facilities	Schools like study tables (40),	Lokapur		B.K./		Venkatapur/		
	Benches (40), Chairs (80), White			Jalikatti		Hebbal		
	boards (22), Smart Class boards (9)			K.D.				
	& projectors (6) and computers (26)							
	in each Govt. School) with wi-fi							

	connectivity (07), Facility of Girl's toilets (06)							
	Construction of library for preparation Competitive Exam (04)	Hanamaneri/ Lokapur	4	Jalikatti B.K./ Jalikatti K.D.	4	Kadarkoppa/ Venkatapur/ Hebbal	2	10
	Distribution of Sports kit to children (60), vending machine of Sanitary napkins (6)	Hanamaneri/ Lokapur	5	Jalikatti B.K.	5	Jalikatti K.D.	5	15
Health & Care Facilities	Organizing Medical Camp in nearby villages (24) (Medical, Eye, Dental etc.) Asha Health Worker support (124) Awareness Programme for Pregnant & Adolescent Women (07) One ambulance facility at Lokapur (Rs. 25 Lakh)	Hanamaneri/ Lokapur	7	Jalikatti B.K./ Jalikatti K.D.	7	Arlikatti/ Kajadoni	7	21
Skill Development	Setting up of skill training centre (04)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Jalikatti K.D.	4	Kadarakoppa	3	12
	Supporting surrounding Villages women Empowerment through Self Help Groups (40)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Jalikatti K.D.	5	Kadarakoppa	5	15
8	Training of farmers or farmers groups in different agricultural methods (MODERN METHODS), Training to farmers to grow the Cash crops to enhance agricultural growth, Dairy farming/ Poultry farming/ Goatary (30)	Lokapur	5	Lokapur	5	Lokapur	5	15
Community Welfare	Infrastructure Development near plant surrounding villages like CC Roads (17000 SQ.ft), Community Halls (02), Construction of Toilets in association with Govt. Schemes, Developing Sports grounds etc.	Hanamaneri/ Lokapur	10	Jalikatti B.K./ Jalikatti K.D.	10	Kadarakoppa / Kajadoni	15	35
	02 Community Centre at Lokapur and Jallikatti K.D.	Lokapur	14	Jallikatti K.D.	-	- Shi	-	14
	Support for Farmers by providing modern equipment (06)	Hanamaneri/ Lokapur	5	Jalikatti B.K./ Jalikatti K.D.	5	Varchagal/ Chitrabanukot	5	15
Environment	Construction of Water Check Dam / Anikat in nearby Villages for increased ground water level (01)	Hanamaneri/ Lokapur	2	Jalikatti B.K./ Jalikatti K.D.	2	Kadarakoppa	2	6
	Provide Water Filter Plant facility in nearby villages as per the requirement (06)	Hanamaneri/ Lokapur	2	Jalikatti B.K./ Jalikatti K.D.	2	Kadarakoppa	2	6
	Free distribution of 10000 Plants (2500 at each village), plantation of trees at prominent public places in nearby villages	Hanamaneri/ Lokapur	1	Jalikatti B.K./ Jalikatti K.D.	0.5	Chaudapur/ Venkatapur	0.5	2

Total		73		55.5		57.5	186	
xiii. Rehabilitation &								
R & R details The Proje villages na the total n Govt. Land The Proje purchase mining are area and 2 The Proje	 The Project Proponent has submitted that ML area 445.37 ha falls in villages namely Hanamaneri, Lokapur, Jalikatti B.K. & Jalikatti K.D. Out of the total mining area 445.37 ha, 419.83 ha is Private Land & 25.54 ha i Govt. Land. The Project Proponent informed that 306.682 ha has been proposed t purchase out of 419.83 ha (private land). Out of 306.682 ha, 289.952 h mining area and 16.73 ha non-mining area for future exploration. It was also submitted that 60.82 ha has been purchased (44.09 ha minin area and 16.73 ha non-mining area for future exploration). The Project Proponent has submitted that the Resettlement & Rehabilitatio 						in 4 ut of na is d to 2 ha ning ation	
(R&R) cos	t of remaining la	nd Rs. 12	1.23	Crore.				
xiv. Court case det Court Case, No and its present status	 ails: The Project P against the Har of Karnataka, (GM-RES) file Harijan @ Mad <u>Chronology and</u> From the H was filed on to time conse On 6.10.20 office comp requested a Regrettably objections of petition. ✓ Consequent before cou objections. ✓ Looking into the compan till date desp court on 06. counsel and copy of the implications 06.10.2023 	roponent namaneri Bengaluru d on 03.4 lar & other d Implicati igh Court a 3.10.2023 straints, th 23, despit liance iter an additior , to date, r or to carry tly, the ma rt appare o above, t y has not bite undert 10.2023, t d as the c e petition thereof, is not ava	has s Limes I vide I 0.202 rs and ion of is wel 3 and e matting s wel 3 and e matting to act r out t atter I ently he co been taking to sup ompa leadir , the ilable	stated t stone M Writ P 23 betw I State o the Cas bite, it listed o ter was in total ek to ac ion has he nece has not on acc mpany served by the l ply copy ny have og to fil e chroi with us	hat o ine Bl etitior veen of Kar se is evi n 4.10 resch d for), the ddres been ddres been count would with Petitic y of pe e not ing o nolog	ne litigation lock in the H No. 2212 Sri. Vittal mataka & or ident that th 0.2023. How eduled for (the second petitioner's s office objectioner's s office objectioner's s office objectioner's a copy of the petition to resist been provident f the petition y of even	n pen High C 5 of 2 Panda thers. ne pet vever, 5.10.2 time advo actions ctify the ents to in till emova terate ne pet sel, be sponde ded w on or ents	ding Court 2023 appa tition due 023. with ocate s. nese o the date al of that tition efore ent's ith a any after

Furthermore	Furthermore, as the petitioner has failed to address these				
objections ev	objections even after a lapse of five months it appears Petitioners				
are not intere	are not interested in pursuing the present petition.				
Undertaking by The project I	Proponent has submitted an u	ndertaking	g vide letter		
Project Proponent dated 14.02.	2024 and stated that only one	litigation	is pending		
w.r.t court case against the	PP and apart from the pendir	ng litigatio	n no other		
notices has	been received by the Proje	ct Propo	nent under		
section 5 of t	he Environment Protection Act	, 1986.			
xv. Affidavit/Undertaking details:					
Affidavit as per Ministry's OM	The Project Proponent has s	submitted	an affidavit		
dated 30.05.2018	vide non-judicial stamp pape	r of Rs. 50) vide dated		
	07.11.2022 and certi	ficate	no. IN-		
	KA77150483416555U in a	ccordance	e with the		
	statutory requirement & ju	dgement	of Hon'ble		
	Supreme Court dated 2 nd	August 2	017 in writ		
	Petition (civil) No. 114 of 2	014 in the	e matter of		
	common cause versus Unior	n <mark>o</mark> f India (& Ores.		
Undertaking by Project Proponent	The Project Proponent	h <mark>as</mark> sub	mitted an		
in EIA/EMP report	undertaking vide letter dated	dertaking vide letter dated 13.02.2024 in Final			
	EIA/EMP Report.		<u>S</u>		
U <mark>ndertaking b</mark> y Consultant in	The Consultant (J.M. Envi	ron <mark>et</mark> Pvt	. Ltd) has		
EI <mark>A/EMP report</mark>	submitted an undertaking	vi <mark>de</mark> le	etter dated		
Z	12.02.2024.				
Plagiarism Certificate	The Project Proponent	has su	bmitted a		
2 State 1 Stat	Plagiarism Certificate dated	12.02.20	24 in Final		
8	EIA/EMP Report.	/			
xvi. Details of the Environmental	Management Plan (EMP) (Rs.	In Lakh)			
S. Acti	vities	Capital	Recurring		
No.		Cost	Cost		
A. Mitigative Measures	pri				
Permanent water sprinkling ar	rangements for main haulage	100	5.0		
'' road	Payments	100	0.0		
7 nos. of Bag-filter for crusher	system (OLBC transfer	175	4 0		
points-6 +1 crusher)	points-6 +1 crusher) 4.0				
3. Installation of Crusher	Installation of Crusher 130 3.0				
4. Acoustic enclosure for OLBC	Acoustic enclosure for OLBC 2				
5. Spill control guarding for OLB	Spill control guarding for OLBC				
6. Canopy along Dry-fog system	of 5 transfer points	100	1.0		
10 nos. of fog canon/mist spra	10 nos. of fog canon/mist sprayer of at least 40 m throw shall				
	be installed at various locations in the mine area 30.0 2.0				

8.	Greenbelt/Plantation on 131.18 ha area with 3,27,950 nos of saplings @ 2500				
	 A. Green belt around 7.5 m periphery covering an area of 8.52 ha within initial 2 years (No. of saplings: 21300) (Considering Rs. 42.60 Lakh) 	42.60	1.0		
	 B. Plantation along the safety barrier of canal 30.72 ha within initial 5 years (No. of saplings: 76,800) (Considering Rs. 153.60 Lakh) 	153.60	0.30		
	C. Plantation along the nallah 10.27 ha, within initial 5 years (Nos of saplings 25,675) (Considering Rs. 51.35 Lakh)	51.35	0.30		
	D. Plantation along the HT line 3.44 ha, within initial 5 years (Nos of saplings 8600) (Considering Rs. 17.20 Lakh)	17.20	0.30		
	E. Plantation/Regrassing 20 ha on backfilled area (No. of saplings: 50,000) (Considering Rs. 100 Lakh) (11 th to 20 th year)	-	10		
	F. Plantation on top soil stacking 32.50 ha on waste dump (No. of saplings: 81,250) (Considering Rs. 162.50 Lakh) (16 th to 20 th year)	162.50	0.30		
	 G. Plantation on top bench of water reservoir 20.39 ha on waste dump (No. of saplings: 50,975) (Considering Rs. 101.95 Lakh) (16th to 20th year) 	101.95	0.30		
	 H. Plantation on Mineral Storage: 1.20 ha, Statutory building: 0.20 ha, Mineral separation plant: 2.0 ha (No. of saplings: 13,350) (Considering Rs. 26.70 Lakh) (At the end of life of mine) 	2 <mark>6</mark> .70	0.30		
9.	Modular STP	50	3.0		
10.	Washing Ramp with Oil-water Separator	32	0.20		
11.	Rain Water Harvesting Plan	60	5.0		
12.	Garland drain shall be made along the nallah (L*W*D = 16m $x 1.2m \times 0.6m$)	4.27	0.20		
13.	Construction of retaining walls within the mine area	6.34	0.20		
14.	Protection for Plantation (Fencing around area)	20	0.50		
15.	Construction of 02 nos Settling Tank	2.0	0.30		
16.	Construction of Protective Bunds ($L^*W = 1.0m \times 1.1m$)	22.49	0.20		
	Sub Total	1608	41.40		
B. N	Ionitoring				
17.	03 nos. of Continuous Ambient Air Quality Monitoring Station at Mine Site for the measurement of air quality for PM10, PM2.5, SO2, NO2 and CO and real time data connectivity with CPCB/SPCB Server	300	10		
18.	Fugitive dust emission monitoring (05 locations * monthly)	10.0	2.0		

	Particulars Budget (Rs. in Crores)				
xvii.	Details of project cost and employment:		S I		
	Total	<mark>19</mark> 50	65		
	Sub Total	342	23.6		
27.	⁷ . Lakh once in 5 years)		1.5		
07	Digital Mapping of entire mine area once in 5 years (Rs. 4.	5	4.5		
26.	Providing Ear muffs/plugs to workers working in high noise area & PPEs	4.0	1.0		
25.	Work Place Noise Level Monitoring (05 locations * quarterly frequency)	^y 4.0	0.2		
24.	Ambient Noise Monitoring (05 locations * quarterly frequency)	4.0	0.4		
23.	Controlled blasting for minimizing ground vibration, fly roc air pressure/ noise, etc. by Using Nonel and Exel	k, _	7.0		
22.	Procurement of the Blast Vibration Measuring Instrument & 5.0 0.5				
21.	Surface Water Quality Analysis (Nallah & Canal: Pre & Post- monsoon) 3.0 0.2				
20.	Ground water quality analysis (Pre and Post-monsoon)	6.0	0.50		
19.	. Installation of 01 nos of piezometer in ML area 6.0 0.30				

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of	Capita <mark>l C</mark> ost: Rs. 21.81
public hearing + Budget Proposed for WLCP)	Crores/-
	Recurring Cost: Rs. 65
	Lak <mark>h/</mark> annum
Project Cost	Rs. 373 Crores
Employment	123 persons

2.5.3 Observation and Recommendation of the Committee:

EAC after deliberations noted that the instant proposal falls under green field project for mining of Limestone (auctioned block). The Project Proponent informed that there is no forest land involved in the mine lease area. The Committee noted that the project proponent has conducted the Public hearing after obtaining the Terms of Reference (ToR). Two Canals and a seasonal Nallah flowing through the ML area which should not be disturbed. On either side of the Canal and Nallah a 50 m safety distance has to be maintained. The crushed limestone will be transported to interlinked cement plant via road till 3rd year and from the 4th year via covered conveyor belt system. The Committee emphasised to submit the detail timeline in form of CPM/PERT chart and submit detailed work related to Civil, Electrical and Mechanical in form of percentage. The Committee

emphasised that the PP should submit one final feasible route out of two proposed route for transportation of Limestone through conveyor belt system.

Subsequently, The Committee noted that the Project Proponent has submitted the revised Socio-economic development plan to address the issues raised during the Public Hearing with a Budget expenditure of Rs. 408.2 Lakhs and Revised Wildlife Conservation Plan submitted to the Forest Department with Budgetary provision of Rs. 110 Lakhs/-. The Committee asked the PP to submit the activity-wise detail of the Socio-economic development plan addressing the issues raised during the Public Hearing and also submit the activity-wise detail of Revised Wildlife Conservation Plan. Accordingly, the PP needs to submit the revised budget of EMP and total project cost (which should include the cost of conveyor belt system separately).

In view of the above, the Committee **deferred** the proposal for the submission of following requisite information:

- i. The project proponent needs to submit the NOC from Indian Railways.
- ii. The Project Proponent shall submit the measures taken for strengthening of mine pit and protection of railway line which is running parallelly along the mine lease.
- iii. As the drilling & blasting activity is proposed and the railway line is passing parallelly the lease boundary, Project Proponent should carry out the scientific study from CIMFR or any other recognized institution of repute which is approved for carrying out such studies. The study should be clearly demonstrated that whether there are any adverse impacts and it can be controlled by adopting mitigative measures or not?
- iv. The Project Proponent should revisit the data submitted on noise level monitoring. The average data should be taken for every 15 minutes interval in view of the sensitivity of the railway line passing parallelly the lease boundary
- v. The PP needs to submit the detail timeline in the form of CPM/PERT chart considering all parameters involved for implementation of mechanized system (conveyor belt) and submit detailed work related to Civil, Electrical and Mechanical in form of percentage.
- vi. The PP should submit one final feasible route out of two proposed route for transportation of Limestone through conveyor belt system.
- vii. The PP needs to submit the updated list of Schedule-I species as per the wildlife Protection amendment act, 2022 and accordingly submit the revised wildlife conservation plan.
- viii. The PP needs to submit the update outcomes of the pending court case.
- ix. The PP needs to submit the revised Public Hearing cost w.r.t. addressing the issues raised during the Public Hearing.
- x. The PP needs to submit the detail backfilling and reclamation plan.

2.6 Sukurangi Chromite Ore Mining Project for enhancement in production capacity from 0.13 to 0.3 MTPA in ML Area of 382.709 Ha by M/s Odisha Mining Corporation Ltd. located at village (s) Sukrangi, Saruabli, Ostapal, Kamarda and Talangi, Teshil Sukinda, District Jajpur, Odisha. [Online Proposal No. IA/OR/MIN/468292/2024, File No. J-11015/348/2015-IA. II(M)] - For Corrigendum in EC dated 30.07.2020 reg.

2.6.1 The proposal is for Corrigendum in EC dated 30.07.2020 of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha.

2.6.2 The details of the project as ascertained from the document submitted by the Project Proponent as given under: -

- i. The PP has obtained the EC vide letter dated 30.07.2020 for mining of chromite of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha.
- ii. The SPCB, Odisha has issued CTO vide letter dated 28.03.2024 for Production capacity of 0.3 MTPA for Chromite ore.
- iii. The PP vide letter dated 03.04.2024 requested MoEF&CC for Corrigendum in EC accorded by MoEF&CC vide dated 30.07.2020 to resolve the following issues:
 - a. Specific Condition No.14 on Page No. 10 of 23 needs to be deleted, as the specified locations mentioned in the said Condition (Kannnappakunta and Kamalapuram) is in the State of Andhra Pradesh and not within Odisha. Also, the similar specific condition pertaining to the site-specific location already exists as Specific Condition No. 5.
 - b. Specific Condition No.15 on Page No. 10 of 23 needs to be deleted as this condition is not in line with the project specific EMP propositions and is over and above the specific condition no.6 (which had been recommended by EAC during the 17th EAC Meeting).
 - c. Specific Condition No. 17 on Page No. 11 of 23 needs to be deleted, as this condition is not in line with the project specific EMP propositions and is over and above the specific condition no.7 (which had been recommended by EAC during the 17th EAC Meeting).

2.6.3 Observation and Recommendation of the Committee:

The EAC after deliberations noted that the instant proposal is for Corrigendum due to typographically error in EC issued by MoEF&CC vide dated 30.07.2020 wherein the existing specific EC condition no. 14, 15 and 17 to be replaced as per earlier EAC minutes dated 28-29 may & 1 June, 2020, which is given below:

Specific condition no. 14: Budget proposed for Corporate Environment Responsibility (CER) shall be ₹ 32.02 Lakhs, which includes a) ₹ 2.5 Lakhs for Employment to locals (₹ 0.5 Lakh from 2019-20 to 2023-24), b) ₹ 2.50 Lakhs for Skill development for local SHGs (₹ 0.5 Lakh from 2019-20 to 2023-24), c) ₹ 2.50 Lakhs for Computer training, Scholarships (₹ 0.5 Lakh from 2019- 20 to 2023-24), d) ₹ 4.50 Lakhs for Creation of employment opportunity (₹ 1.0 Lakh from 2019-20 to 2022-23 &₹ 0.5 Lakh for 2023-24), e) ₹ 5.0 Lakhs for Health care services Medical camps, ambulance (₹ 1.0 Lakh from 2019-20 to 2023-24), f) ₹ 2.50 Lakhs for Pollution Control (₹ 0.5 Lakh from 2019-20 to 2023-24), g) ₹ 2.50 Lakhs for Plantation (₹ 0.5 Lakh from 2019-20 to 2023-24), h) ₹ 2.50 Lakhs for Solar Street lighting, distribution of LED, bulbs to villagers (₹ 0.5 Lakh from 2019-20 to 2023- 24), i) ₹ 2.50 for Drinking Water & sanitation (₹ 0.5 Lakh from 2019-20 to 2023-24), and j) ₹ 5.02 for Peripheral development (₹ 1.0 Lakh from 2019-20 to 2022-23 &₹ 1.02 Lakh for 2023-24). The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and details of implementation of CER activities along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, photographs & Geo-location of the infrastructures/facilities developed, etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

Specific condition no. 15: Budget proposed under Environmental Management Plan (EMP) shall be ₹ 2130 Lakh (Capital) &₹ 190 Lakh (recurring/annum) which includes i) Rs 25.0 Lakh (Capital) & Rs 30.0 Lakh (recurring) for Surface drainage (garland drains, settling its, retaining wall etc.) & dust suppression system (timeline 1st year), ii) Rs 7.0 Lakh (recurring) for Environment Monitoring, iii) Rs 4 Lakh (Capital) (time line 1 year) & Rs 3 Lakh (recurring) for Occupational safety which includes Procurement of safety appliances, iv) Rs 4 Lakh (recurring) for Green Belt Development, v) Rs 1794 (Capital) for Net Present Value (NPV) Payment, vi) Rs 153.0 Lakh (Capital) for Compensatory Afforestation, vii) Rs 154.0 Lakh (capital) (timeline 10 years) Wildlife Conservation Plan, and viii) Rs 146.0 Lakh (Recurring cost) for Socio-economic welfare measures in nearby village which is likely to be revised every year. The amount (except occupational health) proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

Specific condition no. 17: Budget earmarked under Occupational Health plan is Rs 4.0 (Capital) & Rs 3 Lakh (Recurring) which includes Procurement of safety appliances. The amount proposed under this head should be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed environment monitoring report along with proof of activities viz. photographs (before & after with geo-location date & time), purchase documents, sampling reports, photographs& Geo-location of the infrastructures/facilities developed, details of persons engaged in Environment Management Cell etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

In view of the above, the EAC **recommended** the proposal for Corrigendum in EC dated 30.07.2020 for mining of chromite with enhancement in the production of chromite from of 0.3 MTPA in the ML area of 382.709 ha by M/s Orissa Corporation Ltd located at village(s) Sukrangi, Saruabli and village limits of Ostapal, Kamarda and Talangi, TeshilSukinda, District-Jaipur, Odisha as per the EIA Notification, 2006 and its subsequent amendments.

2.7 Petnikota Limestone Mine with production capacity of 4.0 MTPA in the ML area of 912.797 ha by M/s. UltraTech Cement Ltd. located at Village Petnikota, Mandal Kolimigundla, District Nandyal, Andhra Pradesh. [Online Proposal No. IA/AP/MIN/467299/2024, File No. J- 11015/243/2008-IA. II (M)] - For the Extension of validity of EC dated 20.11.2023 reg.

2.7.1 The proposal for extension of validity of EC and its amendment vide dated 14.11.2009 & 20.11.2023 for Petnikota Limestone Mine with production capacity of 4.0 MTPA in the ML area of 912.797 ha by M/s. UltraTech Cement Ltd. located at Village Petnikota, Mandal Kolimigundla, District Nandyal, Andhra Pradesh was submitted on Parivesh portal on 27.03.2024.

2.7.2 The details of the project as ascertained from the document submitted by the Project Proponent as given under: -

 The Project Proponent has requested to extend the validity of EC from 26.04.2024 till Mine Lease Validity i.e., 26.04.2054 of Environmental Clearance (EC) vide letter No J-11015/243/2008-IA. II (M) dated 14.11.2009 & 20.11.2023 as per MoEF&CC Notification S.O. 1807(E) dated 12.04.2022 of Petnikota Limestone Mine (ML Area 912.797 ha) with Existing Limestone Production Capacity of 4.0 MTPA located at Village Petnikota, Mandal Kolimigundla, District Nandyal, Andhra Pradesh.

- ii. The Project Proponent vide letter dated 11.09.2023 requested to the state government of Andhra Pradesh for extending the lease period from 26.04.2024 to 26.04.2054 under section 8A (5) of MMDR Act 1957.
- iii. MoEF&CC Notification S.O. 1807(E) dated 12.04.2022 Para IV mentioned that, "The prior Environmental Clearance granted for mining projects shall be valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier".
- iv. The Project Proponent has submitted Mining Plan with Progressive Mine Closure Plan has been approved over an area of 912.797 ha by IBM on 19.12.2023 for the period of 2024-25 to 2028-29.

S.	Prospecting	Date of the	Name of the	Period	Granted	Mine
No.	License/Letter of	grant	Mineral &	of	by	lease
	Intent (LoI)/ Grant	R	(Major/Minor)	Grant		area in
	of Mine lease and		~ ~ ~	<u> </u>		Ha
	Lr No	A Ref. 7	हत्यात राज्य	1		
1.	PL was granted	03.05.2000	Limestone	2	<mark>Go</mark> vt. of	1357.088
	vide no. G.O.Ms.			years	A <mark>nd</mark> hra	
	No, 252 to M/s.				Pradesh	S I
	Grasim Industries					
	Limited					
2.	The Mining Lease	22.07.2003	Limestone	20	Go <mark>vt</mark> . of	951.848
	was Granted vide	2		years	Andhra	ha
	order no.	B	510		Pradesh	
	G.O.MS.No.222 in	otec	s if She v?			
	favour of M/s.	C	10-		. %	
	Grasim Industries	1PC	CREEN		5	
	Limited		S. S. S.		S.	
3.	Revised extent vide	27.12.2022	Limestone	- 01	Govt. of	912.797
	Order G.O.Ms. No.			e~`	Andhra	ha
	88 in favour of M/s.	e-Pa	monts		Pradesh	
	Grasim Industries		mente			
	Limited					
4.	Transfer of ML in	27.12.2022	Limestone	-	Govt. of	912.797
	the Name of				Andhra	ha
	UltraTech Cement				Pradesh	
	Limited vide order					
	G.O.Ms.No.89					

v. Details of Mine Lease:

5.	Transfer	deed	23.01.2023	Limestone	-	Govt. of	912.797
	Registered	&				Andhra	ha
	Executed					Pradesh	

S.	Details of grant of Mine	Period	of Grant	Name of the	Mine
No.	Lease deed execution	From	То	Mineral	lease area
					in Ha
1.	Mine lease has been	27.04.2004	26.04.2024	Limestone	951.848
	executed and registered				ha
	on 27.04.2004 for 20	C			
	years		\sim		
2.	Revised extent vide Order	27.12.2022	26.04.2024	Limestone	912.797
	G.O <mark>.Ms. No</mark> . 88 in favour				ha
	of M/s. Grasim Industries	- IN			
	Limited	R I V	En		
3.	Transfer of ML in the	27.12.2022	26.04.2024	Limestone	912.797
	Name of UltraTech	fri zun	NO 1	C.	ha
	Cement Limited vide	9/11			
	order G.O.Ms.No.89				D
4 <mark>.</mark>	Transfer deed Registered	23.01.2023	26.04.2024	Limest <mark>o</mark> ne	912.797
	& Executed	7.000			ha

vi. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity
Consent to	Consent For Establishment for 4.0 Million TPA Limestone has
Establish	been obtained from Andhra Pradesh Pollution Control board vide
10 ja	Consent Order No. 141/PCB/CFE/RO-KNL/HO/2009-570 dated
10 A	<u>31.05.2</u> 010.
Consent to Operate	Consent for Operations for 4.0 Million TPA Limestone has been
	obtained from Andhra Pradesh Pollution Control board vide
	Consent Order No. PPCB/KNL/KNL17406/CFO/HO/ 2014-338
	dated 25.04.2014.
	Consent for Operations Consent Order No. 322614/APPCB/
	KNL/KNL17406/CFO/HO/2022 Dated 23.11.2022 valid upto
	31.03.2024. CFO Renewal application was submitted to APPCB
	before expire of the existing CFO validity.
Certified	Compliance Report Certified by RO Vijayawada on 17.10.2023 &
Compliance Report	date of inspection 11.10.2023.
and Inspection date	

Certified	DMG Certified production figures from the inception of mine has
Production Details	been submitted by the Project Proponent.
from the inception	
of the mine (in	
tabular form	
against the EC	
capacity)	

2.7.3 The Committee after detail deliberations noted that the instant proposal is extension of validity of EC from 26.04.2024 to 26.04.2054. Earlier, the EC was issued on 20.11.2023 for validity upto 26.04.2024. The PP has requested to the Director of Mines and Geology, Andhra Pradesh for extending the lease period upto 26.04.2054, while the Director of Mines and Geology, Andhra Pradesh stated that the deemed extension of mining lease is under active consideration and orders will be issued. Therefore, the Committee emphasized to submit a certificate from the State government stating the validity of ML extended upto 26.04.2054.

In view of the above, the Committee **deferred** the proposal for submission of following requisite information:

- i. The PP needs to submit a certificate from the State government stating the validity of ML extended upto 26.04.2054.
- ii. The PP needs to submit the activity-wise detail expenditure status of Public Hearing.

S.No	Member Name	Member Address	Designation	09 th May 2024	10 th May 2024
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes
2	Sh. Niranjan Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur- Rajasthan, 302018	Member	Yes	Yes

List of members of Expert Appraisal Committee participated through VC

3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMSRoad, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand- 248171	Member	Yes	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 (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi- Tech City, Kondapur,Hyderabad- 500081	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	No	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU,Shillong- 793022 Meghalaya	Member	Yes	Yes
8	Dr. Suresh Tiwari, Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Vij Marg Rajinder Nagar, New Delhi - 110060	Member	Yes	Yes
9	Dr. K. <mark>G Asha Manjari</mark> , Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross,BhogadilInd 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	Shri Yogesh Kale Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhavan, Civil Lines, Nagpur - 440001	Member	Yes	Yes
13	Shri Niazi Mohammed	Representative of Directorate General of Mines Safety	Member	Yes	Yes

14 Dr. S. R. Wate	148/149, Nagar vikash	Special	Yes	
	society, Narendra Nagar,	Invitee		
	Nagpur, Maharashtra-			
	440015			
15 Shri Pankaj Verma	3 rd Floor, Vayu Block, Indira	Member	Yes	Yes
	Paryawaran Bhawan,	Secretary		
	MoEF&CC, Jorbagh, New			
	Delhi- 110003.			

