

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

SUMMARY RECORD OF 27th 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 27th 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 20-21st February, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 26th EAC (Non-Coal Mining) meeting held during 31st January, 2024 & 1st February 2024.

The minutes of the 26th Meeting of the EAC (NoN-Coal) held during 31st January, 2024 & 1st February 2024 were placed before the members of the EAC and confirmed by the Chairman.

Day 1: 20th February, 2024 (Tuesday)

1.1 Mukam Bauxite mine with the total production capacity of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA] in the ML area of 110.563 ha by M/s Chhattisgarh Mineral Development Corporation Ltd located at Village Mukam, Tehsil Bodla, District Kabirdham, Chhattisgarh- For reconsideration of Environmental Clearance reg. [File No. J-11015/37/2022-IA.II(M), Online Proposal No. IA/CG/MIN/417404/2023, EIA Consultant - M/s Overseas Min-Tech Consultants]

The instant proposal is for grant of Environmental Clearance for Mukam Bauxite mine with the total production capacity of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA] in the Mine Lease area of 110.563 ha by M/s Chhattisgarh Mineral Development Corporation Ltd located at Village Mukam, Tehsil Bodla, District Kabirdham, Chhattisgarh.

2. The details of the project as ascertained from the document submitted by the PP 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 state boundary of Madhya Pradesh located at 4.48 km in west direction of the mine lease area 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 22°22'45.72558" N to 22° 23' 26.25876" N and Longitude 81° 08' 49.47502" E to 81° 10' 16.84813" E. The mine lease area falls under the Survey of India Toposheet No: 64 F/3 and falls in Seismic Zone-II.
- iii. The PP has obtained the ToR vide file no. IA-J-11015/37/2022 IA-II(NCM) dated 09.11.2022.
- iv. Mine Lease detail:

S.No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No.	Date of the Grant	Name of the Mineral(Major / Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Letter of intent (LOI) vide letter no.F3-3/2021/ 12, Nava, Raipur.	11/04/2022	Bauxite	1 year (further extended upto 26.03.2024)	Chhattisgarh , Government	110.563

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

Private land	67.401Ha
Government land	43.162 Ha
Forest land	Nil
Total Mining lease area (MLA), ha	110.563
Private land for crusher, workshop & other infrastructure outside the MLA	NA
Additional information (if any)	NA

vi. Mining plan details

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	KABIRDHAM/BAUX/KHYO-1335/2022-RAIPUR.
	Date	07.09.2022
	Mineral & (Major/Minor)	Bauxite(Major mineral)
	Mine Lease Area, Ha	110.563
	Validity	5 years
Mining Parameters	Quantitative Description	

Method of Mining	Opencast Semi-Mechanized
Drilling/Blasting	Yes
Geological Reserves	50,26,659.22 Tonnes
Mineable Reserves	32,13,288.26 Tonnes
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	The proposed capacity of the mines is 384615.4TPA bauxite with an area 110.563 Ha.& 418362.12 TPA of OB, 22061.83 m ³ of topsoil and 96153.85 TPA of mineral reject will generate in the five-year plan period.
Life of mine	11 Years
Mine Bench Height & Bench Width	3 m *3 m
No. of Mine Benches	2
Existing Depth, m bgl	-
Ultimate Depth of Mining, m bgl	13m
Ground Water Table, m bgl	Ground water table is below 30 meters ground level
Details of ground water intersection	Up to the life of the mine, there is negligible chance of working going beyond 18 m depth; hence there will not be an intersection with ground water.
Individual bench slope	45°
Overall pit slope	60°
Details of existing/proposed Crusher	NA
Mineral Beneficiation	The sizing and sorting of saleable grade bauxite will be carried out by manual labours and no beneficiation is Required

RoM output size	100-250 mm							
Transportation details including capacity of dumper/tipper, mode of transport and distance	Description			Capacity	Quantity			
	Drilling Machine (DTH)			100 mm	5 m/c Standby 2			
	Excavator & loading equipment			2 m ³	2			
	Bull dozer			1 m ³	1			
	Dumpers			18 t	10 standby 2			
Generation of Topsoil/OB & its Management during plan period & conceptual period	S. No.	Year	Topsoil Generated (m ³) (A)	Topsoil Utilized (m ³) (B)	Topsoil Stored (m ³) (A-B)	Estimated Expenditure (INR)		
	1	Year 1	5722.14	5722.14	0	3000		
	2	Year 2	3706.18	3706.18	0	2000		
	3	Year 3	4246.01	4246.01	0	5000		
	4	Year 4	11358.85	11358.85	0	8000		
	5	Year 5	22061.83	0	22061.83	16000		
<p>The general practice is to scrap the top soil separately by dozer, or excavator dumper combination and temporarily dumped to places where it will be used and then used for spreading over the already backfilled and levelled area. When the backfilled and levelled area will readily available then the top soil scrapped will be directly used for spreading over in such area. Therefore, almost the land will be backfilled.</p>								
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	S. No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)	Total Dump Quantity (m ³)	New Dump Location
	1	Year 1	Dump-1	Waste Dump	0.25	10	3414 7.08	X=517385.8998, Y=2475910.3385 X=517375.9340,
	2	Year 2	Dump-1	Waste Dump	0.25	10	4430 8.37	Y=2475916.1262 X=517347.3113, Y=2475926.5441
	3	Year 3	Dump-1	Waste Dump	0.25	10	5696 6.52	X=517391.5199, Y=2475900.1375 X=517388.6809,
	4	Year 4	Dump-1	Waste Dump	0.25	10	1279 19.44	Y=2475904.7822

5	Year 5	Dump-1	Waste Dump	0.25	10	2100 06.52	
Stack Details – Proposed on Site							
S. No.	Year	Stack ID	Type of Stack	Proposed Area (ha)	Height (m)	Total Stack Quantity (m ³)	New Stack Location
1	Year 1	Stack-1	Ore Stack	0.49	3	5722 .14	X=517480.8582Y =2475797.6728
2	Year 2	Stack-1	Ore Stack	0.49	3	3706 .18	X=517480.8582Y =2475797.6728
3	Year 3	Stack-1	Ore Stack	0.49	3	4246 .01	X=517471.0387Y =2475769.6698
4	Year 4	Stack-1	Ore Stack	0.49	3	1135 8.85	X=517560.4557Y =2475751.4214
5	Year 5	Stack-1	Ore Stack	0.49	3	2206 1.83	X=517480.8582Y =2475797.6728
<p>During the first five years, about 23.014 Ha area will be covered as mining pit, out of this about 8.14 Ha area will be backfilled by OB and waste. Up to the life of the mine, about 68.01 Ha area will be covered as a pit and 40.716 Ha area will remain as virgin land within the statutory barriers and no-ore zone. Out of the total pit area of 68.01 Ha, almost all will be backfilled and reclaimed. This means 40.716 Ha. Area will be virgin i.e. undisturbed land and 68.01 Ha. Area, the backfilled levelled area both will be returned to their original owner for agriculture. There will be continuous backfilling and returning of land to the owners as the mining operation continues.</p>							

vii. Water requirement

Total water requirement	6.5KLD	Domestic /Drinking	2.325 KLD
		Dust suppression	0.425 KLD
		Green Belt	3.750 KLD
Source	Local Supplier through Gram Panchayat.		
Permission for withdrawal/ intersection along with details of grant and its validity	The water required is mainly for dust suppression and drinking and other domestic purpose during mining operations. Drinking & domestic water will be fulfilled from tube well while other will be met from authorized water		

	supplier(NoC already taken from concerned Gram Panchayat).
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viii. Nearest village/town/ highway / interstate boundary / railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance &Directions
Village	Mukam	0.5 km
Town	Kawardha	62 km
Highway	NH-12 Bodla to Daldali	42 km
Interstate Boundary	Madhya Pradesh state boundary	4.48 km
Railway Station/Railway line	Bilaspur Railway station Raipur Railway station	110km 135 km
Water Bodies	Mania Nadi Lilari Nadi Hanp Nadi	3.1 km, NWN 2.6km, NW 4.4 km, ENE
Forest	RF No. 17 (54 M), RF No. 23 (50 M) and RF No. 24 (103 M)	

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent has submitted that the mine lease area is either private land or Govt. Revenue land. In support of this, Certificate from the Chief Conservator of Forest has been obtained on 28.02.2023 regarding non involvement of forest land.
National Park	No	Phen Wildlife Sanctuary, Buffer Zone of Kanha National Park and Kanha-Achanakmar Tiger Corridor lies in the proximity of 10 km radius periphery of mines lying within the State of Madhya Pradesh which is about 5 kms from the site of mines.
Wildlife Sanctuary	Yes	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	
Coastal Regulation Zone (CRZ)	No	The project site is not falling near to any LTL, HTL, and CRZ area.
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	PP vide letter no. 1066/2023 dated 08.12.2023 submitted the list of Flora and Fauna certified by PCCF, Madhya Pradesh & CCF, Chhattisgarh.

		The detailed study has been carried out and Wildlife Conservation and Management Plan has been prepared and submitted to PCCF (wildlife), Chhattisgarh and Director, Kanha Tiger Reserve, Mandla (M.P.) for their approval.
Wildlife Conservation Plan	Yes	Wildlife Conservation Plan is approved vide letter no. क्रमांक/व.प्रा./माचि./MINE-150/ 8387 Dated 21.09.2023.

x. Green belt/plantation details

Proposed area for green belt/plantation and no. of saplings proposed	2.00 ha area for greenbelt /plantation and 250 saplings per year i.e., 1250 saplings
Budget for green plant& plantation till the end of life of mine.	Rs1.0 lakh
Budget for nursery	-
Details of existing plantation and its survival rate	85%
No. of tree cuts in the mine lease area and compensatory afforestation	Nil

S. No	Year	Green Belt Location (s)	Area Proposed to be Covered (Ha)	Grassing proposal (m2)	Number of Plants Proposed	Expected Survival Rate (%)	Estimated Expenditure (INR)
1	Year 1	Plate No. 7(A)	0.40	10208.15	250	85	20000
2	Year 2	Plate No. 7(B)	0.40	4600.99	250	85	20000
3	Year 3	Plate No. 7(C)	0.40	22536.69	250	85	20000
4	Year 4	Plate No. 7(D)	0.40	44077.80	250	85	20000
5	Year 5	Plate No. 7(E)	0.40	0	250	85	20000

xi. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March to May, 2022

Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer		
Predominant Wind direction (From)	North		
Ambient Air Quality (no. of locations) and results	No. of Locations	Parameters	Results
	7	PM10	51.6 to 66.2 $\mu\text{g}/\text{m}^3$
		PM2.5	19.2 to 30.6 $\mu\text{g}/\text{m}^3$
		SO2	8.1 to 12.8 $\mu\text{g}/\text{m}^3$
		NO2	9.8 to 16.7 $\mu\text{g}/\text{m}^3$
Noise level (no. of locations) and results	No. of Locations	Parameters	Results
	7	During Day Time [Leq dB(A)]	50.4 to 64.8
		During Night Time [Leq dB(A)]	36.8 to 51.2
Water Quality (no. of locations) and results	Ground water quality – 7 No.s		
	Parameters	Results	
	pH	7.32 – 7.76	
	TDS (mg/l)	296 - 340	
	Fluoride (mg/l)	0.42 – 0.88	
	Sulphate (mg/l)	36 - 82	
	Calcium (mg/l)	45.6 – 75.3	
	Magnesium (mg/l)	18.0 – 27.2	
	Surface Water Quality - 2 No. s		
	pH	7.4 – 7.6	
	TDS (mg/l)	292 – 352	
	COD (mg/l)	122 – 126	

	DO (mg/l)	-	
	BOD (mg/l)	26-28	
	Magnesium (mg/l)	11.6-19.4	
Soil Quality (no. of locations) and results	No. of Locations	Parameters	Results
	07	pH	7.56 - 7.92
		Conductivity, mS/m	42 - 52
		Texture	Sandy Loam
		Organic Matter (%)	0.98 to 1.18 %
		Available Nitrogen, %	0.042 - 0.058
		Available Phosphorus, kg/ha	26.5 - 32.4
		Available Potassium, kg/ha	88-176
Traffic study (no. of locations) and results	<p>The PP reported that the traffic study was carried out on metal road project site to NH-130A via Daldali village which is in South-east after traversing 40 km. Post project PCU will be 1235 PCUs (1136 PCUs Existing + 99 PCUs Post) on Project site to NH-130A metal road. The LOS value from the proposed mine may be “very good” for Project site to NH-130A Road. So, the additional load on the carrying capacity of the concern roads is not likely to have any significant adverse effect.</p>		

xii. Public Hearing (PH) Details

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	The Pioneer (Dec 27, 2022), Nav Pradesh (Dec 27, 2022)
Date of Public Hearing	31/01/2023

Venue	Government Primary School's ground, Village: Mukam, Tehsil: Bodla, Dist: Kabirdham (Chhattisgarh)
Chaired by	Additional Collector of Kabirdham
Main issues raised during PH	<ul style="list-style-type: none"> • Regarding leveling of land after mining. • Regarding consent for Bauxite mine. • Regarding consent on providing Employment and compensation. • Employment to the local people. • Regarding not giving land for mining.
Budget proposed for addressing issues raised during PH over 3 years	18 lakh (CER budget)

xiii. 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	Will obtain after EC
Consent to Operate	Will obtain after EC
Certified Compliance Report and Inspection date	Will obtain after EC
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Will obtain after EC

xiv. Rehabilitation & Resettlement (R&R)

R&R details	The Project Proponent has submitted that R & R is not applicable, As there is neither any displacement of any family nor there is destruction of any houses/dwellings. The Additional Collector, Kabirdham on 06.02.2023 issued the Certificate regarding non applicability of R&R policy.
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xv. Court case details

Court Case, No and its present status	The Project Proponent has submitted an undertaking by way of Affidavit dated 23.11.2022 stating that since it is a fresh mining lease there is no litigation pending relating to this project before any court of law.
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xvi. Affidavit/Undertaking details

Affidavit as per Ministry's OM dated 30.05.2018	The PP has submitted an undertaking by way of Affidavit dated 23.11.2022 stating that no illegal mining activity has been or is being carried out in the mining lease in violation of the Mines and Minerals (Development and Regulation) Act, 1957, Water (Prevention and Control of Pollution) Act,
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	1974, Air (Prevention and Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and other relevant laws.
Undertaking by PP in EIA/EMP report	The PP has submitted an undertaking by way of Affidavit dated 23.11.2022 stating that the data and information given in the application and enclosures and other documents are true to be best of their knowledge and belief and they are aware that if any part of the data and information is found to be false or misleading at any stage, the project will be rejected and clearance given if any to the project will be revoked at our risk and cost.

xvii. ADS detail and reply submitted by PP:

- a. The proposal was earlier considered in the 12thEAC (Non-Coal Mining) meeting held during 21-22nd March, 2023 wherein the EAC constituted a sub-committee to ascertain the ground reality with the recommendations of sub-committee. The PP has submitted the following additional information along with the observation of site visit by the subcommittee: -

S. No.	Additional Information	Compliance by PP
I	The PP needs to submit the valid Letter of Intent (since the Lol expiring on 27.03.2023) for further consideration of the proposal before the EAC.	Government of Chhattisgarh, Mineral Resource Department vide Letter No. F-3-03/2021/12, Dated 27.03.2023 has issued Grant Order in favour of CMDC for Mukam Bauxite Mines 110.563 ha. Which is valid for 01 year i.e. upto 26.03.2024. The Grant Order Dated 27.03.2023 has been submitted by PP.
II	The PP needs to submit the action plan for rehabilitation of mined out areas and year wise backfilling plans and sections along with the timeline.	PP has submitted the conceptual plan.
III	The PP needs to explore the possibility of deploying the Ripper and Dozer combination to eliminate the drilling and blasting in view of close proximity of the Mukam village and the Forest/Wildlife.	The PP has agreed to explore the possibility of deploying the Ripper and Dozer combination to eliminate the drilling and blasting in view of close proximity of the Mukam village and the Forest/Wildlife. As CMDC is all ready in practice in one of the Bauxite mines.
IV	The PP needs to submit the action plan to monitor the movement of tigers	An action plan has been prepared to monitor movement of tigers in the vicinity of

	<p>in the vicinity of the mine lease area and the PP needs to ensure the tiger corridors passing in the study area from Digital Support System (DSS) available in NTCA website.</p>	<p>the mine lease area. The main objective of the action plan is to conserve & protect tigers and minimizing the conflict between mining activity and wildlife. To monitor the tiger movement in mine lease area & its closes vicinity and tiger movement in buffer Zone area of mine lease area i.e. 10 km radius area of mine lease falling in territorial forest jurisdiction of Chhattisgarh, which is forest area of Taregaon and Pandariya forest Range of Kawardha Forest Division has been dealt separately. An additional budget provision has been made for the prescribed works.</p> <p>The distance of Phen Wildlife Sanctuary from the boundary of Mukam bauxite mine lease area is 4.10 km and Kanha Achanakmar Tiger Corridor is approximately 5.89 Km. A map prepared with the help of Digital support system (DSS) available in NTCA Website showing distance has been submitted by PP.</p>
V	<p>The PP needs to submit the letter from the State Forest Dept. Madhya Pradesh regarding the distance of the Tiger Corridor and ESZ along with the authenticated map and authenticated list of flora and fauna since the study area of the 10km radius of the buffer zone falling in the State of Madhya Pradesh. PP also needs to submit the letter from the State Forest Dept, Chhattisgarh regarding the list of flora and fauna by indicating the type of Schedule species found in the study area</p>	<p>The study area of Mukam Bauxite mine i.e. 10 km. radius area from the periphery of mine lease area situated in two states, Chhattisgarh & Madhya Pradesh. Separate wildlife conservation and Management Plan has been prepared for each state.</p> <p>a. The Wildlife conservation and Management Plan for study falling in Madhya Pradesh has been submitted to PCCF Wildlife M.P through the D.F.O. and Field Director Kanha National Park Mandla and it has been approved. The said Wildlife Conservation and Management Plan contains list of flora & Fauna (Containing List of schedule-I animals has been submitted by PP. A forest map of 1:50,000 scale showing 10 km radius area from the periphery of the mine lease area and the map showing the Kanha Achanakmar Tiger Corridor and Eco Sensitive zone of</p>

		<p>Phen Wildlife Sanctuary using DSS from NTCA has been submitted by PP. A copy of Wildlife Conservation and Management Plan for study area falling in M.P. has been approved and submitted by PP.</p> <p>b. The wildlife conservation and Management Plan for study falling in C.G. has been Submitted to PCCF Wildlife C.G. through DFO, Kabirdham and CCF, Durg and is under active consideration before the PCCF, Wildlife for approval. The said Wildlife Conservation and Management Plan contains the list Flora & Fauna (containing List of schedule-I animals has been submitted by PP). A copy of Wildlife Conservation and Management Plan for study area falling in C.G. has been submitted by PP.</p>
VI	The PP 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.	<ol style="list-style-type: none"> 1. A copy of transportation route and detailed study report of traffic density survey & carrying capacity and impact of transportation on environment etc was submitted by PP. 2. As per approved mining plan the peak rated production of the mine is around 2,88,461.00 ton per year. Considering 300 working days in a year and 8 hours in a day the hourly production will be around 120 ton. To cope-up the hourly production CMDC will require 06 trips of 18/20 Tonner tippers/dumper. It is proposed in the approved around fleet of 10 tippers/dumpers will be required.
VII	The PP needs to submit the map indicating the location of garland drains, retaining walls and silt check dam along with the timeline for construction.	CMDC will construct garland drains, retaining walls and silt check dam as per the provisions of approved mine plan (in first five years). The map indicating the location of garland drains, retaining walls and silt check dam has been submitted by PP.
VIII	The PP needs to the revise the activity-wise time-bound action plan on the issues raised and commitment	Time-bound action plan on the issues raised and commitment made during public hearing has been submitted by PP.

	made during public hearing in compliance of the Ministry's OM F.No.22-65/2017-IA.III dated 30th September, 2020 over a period of 3 years. The PP shall ensure that the activities proposed under the public hearing is different from the CSR activities.	
IX	The PP needs to submit the employment scheme/skill development plan to be adopted for employing the local persons in mine and its action plan to implement the same. Further, PP shall provide the details of employment to be provided to the local people with timeline.	The employment scheme/skill development plan has been submitted by PP.
X	The PP needs to submit the Wildlife Conservation and Management Plan in PARIVESH portal.	CMDC has prepared Wildlife Conservation and Management Plan for both the States i.e. Madhya Pradesh and Chhattisgarh. Wildlife Conservation and Management Plan for Madhya Pradesh is being approved by PCCF(Wildlife), Madhya Pradesh and another Wildlife Conservation and Management Plan for Chhattisgarh State is under process for its approval.
XI	PP shall submit dust pollution mitigation measure for villages nearby the mine lease (eg. Mukam Village is located approx. at a distance of 0.5 km from the mine lease area).	The dust pollution mitigation measure for villages nearby the mine lease has been submitted by PP on Parivesh portal.
XII	The site visit report of the sub-committee.	The site visit report (MoM Dated 29.09.2023) of the sub-committee has been submitted by PP.

b. Observation of sub-committee based on the site visit from 17.08.2023 to 19.08.2023 and compliance of PP are as follows:

S. No.	Additional Information	Compliance by PP
1	The PP shall undertake a survey to count the number of trees present in the lease area.	Tree counting has been conducted and completed by the Forest Department. Tree counting sheet duly signed by the concerned DFO Kabirdham dated

		20.10.2023 has been submitted by CMDC.
2	The PP should take permission before felling of trees and shall submit the action plan for compensatory afforestation.	It is important to mention that no forest land involve in the lease boundary of Mukam Bauxite Mine. Therefore no forest clearance and compensatory afforestation is required to operate the mine. CMDC further ensures to the committee that during the mining operation no tree within the mining lease area shall be felled.
3	During site visit, habitation and school are seen near the mine lease area. PP should submit the precaution measures with an action plan.	In this regards CMDC has informed to the sub-committee members that mining operation will be carried out through ripper and rock breaker combination. So there will be no harm to the nearby habitation. It is important to mention that at present CMDC is practicing the same combination one of its bauxite mine which is located in district Surguja.
4	To maintain the dust free environment, the committee was of the opinion that PP should include provision for permanent sprinklers for the entire mineral transportation route.	To maintain the dust free environment CMDC ensure to carry out regular water sprinkling on the haul/transport road inside the lease and even on the roads outside the lease boundary in close proximity to village. Further, to minimize the impact of dust it is proposed to develop a green belt by dense plantation throughout the safety zone.
5	The Committee was of the opinion that the PP may explore the expand the road width and accordingly a plan needs to be submitted along with timeline and cost.	Since the road outside the lease area is a public road and belongs to State Government. Chhattisgarh Mineral Development Corporation will surely approach to the Government of Chhattisgarh for its widening through District Mineral Fund (DMF) and the decision of the same will be communicated to the MoEF&CC.

6	The PP needs to submit the sequence of mining as the mine lease area involves an area of 67.401 ha of agriculture land and shall submit the action plan for restoration of ecology.	CMDC ensures that mining activities will be taken up as per approved mining plan by IBM, Raipur.
7	The PP needs to submit the letter from the State Forest Dept, Madhya Pradesh regarding the distance of the Tiger Corridor and ESZ along with the authenticated map and authenticated list of flora and fauna since the study area of the 10km radius of the buffer zone falling in the State of Madhya Pradesh. PP also needs to submit the letter from the State Forest Dept, Chhattisgarh regarding the list of flora and fauna by indicating the type of Schedule species found in the study area.	The map showing distance of Phen and Kanha Tiger Reserve is submitted before the committee. The list of flora and fauna duly signed by APCCF (Wildlife) of Madhya Pradesh and Chhattisgarh is also submitted by CMDC. The photograph showing the distance of Tiger Corridor and the list of flora and fauna has been submitted by PP.
8	The PP needs to seek comments from the State DMG, if any illegal mining done by PP or not.	The Certificate issued by State DGM dated 01.12.2023, regarding no illegal mining activities in the Mukam Bauxite Mine by CMDC has been submitted by PP.
9	The PP needs to provide the exact distance of school and Mukam village near the mine lease area	The exact distance of school and Mukam village are around 173.50 m & 547.74 m respectively. The map showing the distance of School and Mukam Village has been submitted by PP.

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

Activities	Capital cost (lakh)	Recurring cost (Lakhs/annum)
Pollution control & Dust suppression	2.0	1
*Air, water, soil and noise monitoring	10	2.0
Plantation and green belt development	2.0	3.0
Health checkups and Emergency support	1.0	1.0
Safety Drills and PPEs	2.0	1.5

Expenditure on skill development Trainings	1.0	1.0
Reclamation	-	1.5
Total	18	10

xix. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	0.28
Project Cost	9
Employment (No.s)	93 number

3. Observation and Recommendation of the EAC: -

The PP/Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area and study area of 10km radius. The PP informed the EAC that the instant proposal attracts the general conditions as the Interstate Boundary of Chhattisgarh-Madhya Pradesh is located at a distance of 4.48 km, W from the mine lease area. Mukam Village is located approximately at a distance of 0.5 km from the mine lease area. The proposed mineral transportation will not be passing through the village road. The EAC noted that the PP has obtained the Letter of Intent (LoI) for the grant of mining lease from the Government of Chhattisgarh vide letter dated 11.04.2022 for mining of mineral bauxite over an area of 110.563 Ha in Village Mukam, District Kabirdham and the LoI is valid upto 26.03.2024.

The PP informed the EAC that the Phen Wildlife Sanctuary, Buffer Zone of Kanha National Park and Kanha-Achanakmar Tiger Corridor lies in the proximity of 10 km radius periphery of mine lying within the State of Madhya Pradesh which is about 5kms from the site of mines and not within the State of Chhattisgarh. The EAC also noted that the Final Notification declaring Eco Sensitive Zone around Kanha National Park and Phen Sanctuary, Madhya Pradesh was declared by the Ministry vide S.O 1198(E) dated 12.03.2021. The Eco-Sensitive Zone covers the entire notified buffer area of Kanha Tiger Reserve around Kanha National Park and Phen Wildlife Sanctuary. The Eco-Sensitive Zone is upto an extent of zero kilometres (due to interstate boundary) to 30 kilometres around the boundary of Kanha National Park, the Buffer Zone, and the Phen Wildlife Sanctuary.

The PP has submitted the Map showing distance of Phen Wildlife Sanctuary & Kanha Achanakmar Tiger Corridor from mine lease area. PP referring the letter of DFO Kabirdham dated 20.10.2023 informed to the committee that Schedule-I species such as Leopard, Elephant, Bear and Peacock present around the ML area. PP also informed that forest area, National Park, Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Reserve, Habitat for migratory birds in the state of Chhattisgarh does not come within the 10 km radius of the mining lease area.

The PP informed the EAC that the height of the bench will be 6m. The EAC asked the PP to deploy the Ripper Dozer combination to eliminate the drilling and blasting in view

of close proximity of the Mukam village and the Forest/Wildlife. The PP also informed the EAC that the ground water table is found at a depth of 30m bgl and the ultimate depth of the mining will be upto 13m and the mining activity will not intersect with groundwater table.

EAC noted that a School is located at 173.5 m & Mukam village is at 500m from the project boundary. Due to very close proximity of School & Mukam Village from the project boundary, Committee asked the PP to ensure that no blasting is undertaken near the School & Mukam village. PP also asked to ensure the basic amenities for Health, Education & Employment along with the availability of drinking water facility and three-tier Green belt plantation along the periphery of Mukam village & School.

Subsequently, Committee noted that during the Public Hearing the main issues were raised related to the leveling of land after mining, Employment and compensation to the local people for not giving land for mining. PP has submitted the EMP budget of Rs. 28 lakh (Capital cost Rs. 18 Lakh & recurring cost Rs. 10 Lakh) as mentioned in the EIA-EMP report.

Committee noted the compliance of additional information sought during the previous EAC meeting along with the compliance of the subcommittee report after visiting site. Committee also asked the PP to implement the recommendation of certified wildlife conservation plan approved by Chief Wildlife Warden, Madhya Pradesh and to be approved by the by Chief Wildlife Warden, Chhattisgarh.

Based on the above, EAC **recommended** the proposal for grant of Environmental Clearance for Mukam Bauxite mine with the total production capacity of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA] in the ML area of 110.563 ha by M/s Chhattisgarh Mineral Development Corporation Ltd located at Village Mukam, Tehsil Bodla, District Kabirdham, Chhattisgarh under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions in addition to the standard EC conditions applicable for Non-coal mining projects:

- i. The Environmental Clearance (EC) will be valid for 27 years from the date of issue of this EC as the life of the mine is 27 years.
- ii. PP to obtain the CTO for the total production capacity of 802977.5 TPA [384615.4 TPA (ROM) & OB 418362.1 TPA] for the Bauxite mining.
- iii. PP should implement the action plan for rehabilitation of mined out areas within the defined timeline.
- iv. PP shall not undertake felling of trees within the mine lease area.
- v. PP needs to implement the Ripper Dozer combination to eliminate the drilling and blasting in view of close proximity of the Mukam village, School and the Forest/Wildlife.
- vi. PP shall take appropriate mitigation measures in order to ensure the movement of tigers in the vicinity of the mine lease area.
- vii. PP shall obtain No Objection Certificate from Central Ground Water Authority for extraction of ground water and submit to Ministry's Regional office.
- viii. PP shall transport the mineral by covered trucks with the maximum fleet size from the dedicated route and no village road shall be used for transportation. The transportation route should not cross any habitation/Forest & Wildlife area.

- ix. PP should implement the water distribution pipeline system within the nearest Makum village and existing school.
- x. PP shall implement the activities-wise proposed budget for Public Hearing Budget (as mentioned in EIA-EMP report). The PP shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xi. PP shall implement the activities-wise proposed Capital cost of Rs. 28 Lakh (as EMP cost mentioned in the EIA-EMP report). The details of annual expenditure incurred shall be part of report to be submitted to IRO, MoEF&CC. 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.
- xii. The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. 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.
- xiii. The over burden dumps should be stabilized by plantation and ankering with geo textile/ coir nets / blankets. Plantation program needs to be scientifically planned.
- xiv. The PP needs to undertake a periodical health check up once in six months to prevent from the occupational health exposure on mine workers/local people, land, water bodies and biological environment due to mining activity with respect to hexavalent chromium and total chromium. All the health records need to be maintained digitally.
- xv. The PP needs to make provision for proper collection arrangement of runoff water from the OB dump area and mineral storage area by properly constructed garland drainage , retaining wall and settling pond.
- xvi. The PP needs to take up works for cleaning of the garland drains, stabilizing the retaining wall regularly and also shall take necessary steps for proper terracing the OB dumps.
- xvii. The PP shall undertake adequate control measures in areas such as loading and unloading points by properly installed dust suppression system.
- xviii. The PP needs to make provision for permanent water sprinklers instead of mobile tankers all along the haul road. About, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine lease area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
- xix. The PP needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in 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.
- xx. The PP should submit the wildlife conservation plan approved by Chattishgarh Wildlife Department to the regional office of the Ministry before starting the mining operation. The PP should also 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.

- xxi. The PP 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 Regional Office.
- xxii. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at source, and other areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions.
- xxiii. The PP 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.
- xxiv. The PP 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.
- xxv. The PP shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xxvi. 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, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the PP shall obtain such permission.
- xxvii. The PP shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment.
- xxviii. 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.
- xxix. The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within five years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent

shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.

1.2 Expansion of Choutapalli Limestone Mine-II for enhancement of production capacity from 2.72 MTPA to 5.0 MTPA with the total Excavation of 5.582 MTPA (Limestone 5.0 MTPA + Over Burden 0.386 MTPA + Topsoil 0.196 MTPA) in the mine lease area of 156.586 Ha by M/s My Home Industries Private Limited located at Villages Choutapalli, Mattampalli Mandal and Mellacheruvu, Mellacheruvu Mandal, District Suryapet (Telangana) – For Environmental Clearance reg. [F.No. J-11015/445/2013-IA.II(M), Proposal No. IA/TG/MIN/459729/2024, EIA Consultant: B.S. Envi – Tech Pvt. Ltd]

The instant proposal is for obtaining expansion of Choutapalli Limestone Mine-II for enhancement of production capacity from 2.72 MTPA to 5.0 MTPA with the total Excavation of 5.582 MTPA (Limestone 5.0 MTPA + Over Burden 0.386 MTPA + Topsoil 0.196 MTPA) in the mine lease area of 156.586 Ha by M/s My Home Industries Private Limited located at Villages Choutapalli, Mattampalli Mandal and Mellacheruvu, Mellacheruvu Mandal, District Suryapet (Telangana).

2. The details of the project as ascertained from the document submitted by the PP 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 project falls under the category 'B' proposal, PP has submitted their application at central level due to the absence of SEIAA, Telangana and thus being appraised at the Central level.
- ii. The mine lease area is located between Latitude 16⁰46'36.1"- 16⁰47'40.00" N and Longitude 79⁰ 53' 49.00"- 79⁰ 54' 53.4" E. The mine lease area falls under the Survey of India Toposheet No: 56 P/13 (Scale 1:150000) and falls in Seismic Zone-II.
- iii. Details of previous Environmental Clearance (EC):
 - a) The PP submitted that initially Environmental Clearance was obtained vide Lr No J-11015/445/2013-IA.II(M) dated 14.10.2016 for a production of 2.72 MTPA in the mine lease area of 156.586ha in favour of M/s. My Home Industries Limited.
- iv. Details of Terms of Reference:
 - a) The PP obtained Terms of Reference (ToR) vide file no. SIA/TG/M IN/420479/2023 dated 26.05.2023 for Choutapalli Limestone Mine-II (156.586 ha) of My Home Industries Private Limited.
- v. Details of Mine Lease in chronological manner:

S.no	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha

1	Mine lease: G.O.Ms. No. 75	dated 20.12.2016	Limestone Major	50 years from 03.01.2017 to 02.01.2067	Govt of Telangana	156.586
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S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Proceeding No. 5115/ML/LS/2012 DATED 03.01.2017	03.01.2017	02.01.2067	Limestone	156.586

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

Private land	Private Agriculture Non-Irrigated Land – 151.163 Ha
Government land	Govt. Waste Land – 5.423 Ha
Forest land	0
Total Mining lease area (MLA)	156.586 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	-

vii. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	AP/KNL/MP/LST-74/HYD
	Date	07.03.2023
	Mineral & (Major/Minor)	Limestone - Major Mineral
	Mine Lease Area, Ha	156.586 Ha
	Validity	2022 - 2023 to 2025 - 2026.
Mining Parameters	Quantitative Description	
Method of Mining	Open Cast Mechanized with deep hole drilling and blasting.	
Drilling/Blasting	Drilling is being carried out by wagon drills Blast holes having 115mm diameter are drilled at 15° inclination in a pattern of 3.0 m Burden and 6.0 m spacing.	
Geological Reserves	168.09 Million	
Mineable Reserves	135.01 Million	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Total Excavation of 5.582 MTPA (Limestone: 5.0 MTPA+ Over Burden:0.386 MTPA+ Topsoil:0.196 MTPA) in the existing area of 156.586 Ha	
Life of mine	27 years	

Mine Bench Height & Bench Width	Mine Bench Height: 7.5 m & Bench Width: 20m
No. of Mine Benches	3
Existing Depth, m bgl	23 m
Ultimate Depth of Mining, m bgl	45 m bgl
Ground Water Table, m bgl	30 m bgl
Details of ground water intersection	No
Individual bench slope	80°
Overall pit slope	45°
Details of existing/ proposed Crusher	Crusher of 1350 TPH capacity & 850 TPH located within cement plant area in Choutapalli Limestone Mine of MHIPL at a distance of 4.0 km (both ways) from the farthest mine pit to crusher.
Mineral Beneficiation	None
RoM output size	-75 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	Limestone Transported by dumpers and crushed limestone is transported to cement plant through closed belt conveyor. (850 TPH & 1350 TPH) - at cement plant by a road length of 4 km
Generation of Topsoil/OB & its Management during plan period & conceptual period	The total ML area is rocky terrain covered with around 0 m to 6.5m (maximum) top soil cover except small portions of the area. The estimated total top soil generation during the life period of 50 years will be about 7,66,414.45 cu. mts. Out of the generated top soil quantity about 27,423.19 cu. mts of top soil will be stored. And the remaining top soil quantity of 7,38,991.26 cu. mts will be used for afforestation development along the barrier zone and proposed plantation areas during the 50 years life period of mine and reclamation of the worked out Pit preparation of soil bund.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	No mineral rejects

viii. Water requirement

Total water requirement	Present requirement = 30 m ³ /day	Fresh water	155 m ³ /day
	After expansion = 125 m ³ /day	Treated water	-
Source	existing Mine pits of MHIPL		
Permission for withdrawal/ intersection along with details of grant and its validity	Not APPLICABLE		

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

Particulars	Particular's Name	Distance & Directions
Village	Yepal Madhavaram	1.9 km – E
Town	Miryalaguda	36.5 km - WNW
Highway	NH-65 connecting Vijayawada – Hyderabad	1.7 km – NE
Interstate Boundary	Telangana – Andhra Pradesh	9.32km - SW
Railway Station/Railway line	Railway Station: Miryalaguda Railway line: Damercherla - Vijayawada	39.8 km – WNW 1.0 km in Northern direction
Water bodies	NSP Canal UraVagu Nearest Canal Krishna River	0.05 km – W 1.17 km – E 3.13 km – ENE 8.8 km – SSW
Forest	Raghnathapalem R F	– 0.2km - E

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	-
National park	No	-
Wildlife Sanctuary	No	-
Elephant/Tiger Reserve	No	-
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	-
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	There are Jackal, Indian Porcupine, Bonnet Macaque, Grey Mongoose, Indian Chameleon, Indian Cobra, Indian Rat Snake, Shikra, Eurasian Eagle Owl, Brahminy Kite, Small Minivet, River Tern, Barn Owl Schedule-I species recorded in study area for which Wild Life Conservation Plan is being initiated.
Wildlife Conservation Plan	Yes	Wild Life Conservation Plan is being initiated.

xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Proposed Afforestation: 1.42 Ha with 2130 sapling with a budget of Rs.4.26 Lakhs
Budget for green plant & plantation till the end of life of mine.	Proposed Capital Cost: Rs. 4.26 Lakhs Proposed Recurring Cost: Rs. 2.13 Lakhs
Budget for nursery	None
Details of existing plantation and its survival rate	<ul style="list-style-type: none"> Existing Greenbelt: 3.45 Ha in 7.5 m barrier zone of ML area Number of saplings:3327 Amount spent Rs Lakhs:6.654 Survival rate:60%
No. of tree cuts in the mine lease area and compensatory afforestation	0
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	4.87 Ha (width barrier zone all along ML boundary)
50 m safety zone of nallah, roads, electric lines	-
300 m safety zones of nearest habitation villages	-

xii. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	01.12.2022 to 28.02.2023
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter Season
Predominant Wind direction (From)	ESE-SE-SSE direction
Ambient Air Quality (no. of locations) and results	AAQ Parameters at 09Locations PM10 = 41.6 to 70.6 µg/m ³ PM2.5 = 19.4 to 29.5 µg/m ³ SO ₂ = 9.0 to 14.5 µg/m ³ NO ₂ = 10.3 to 15.9 µg/m ³ CO: less than 1 PPM
Noise level (no. of locations) and results	Noise Levels At 9 Locations ❖ Day time: Core zone: 71.4 to 73.9 dB (A); Buffer Zone:51.6 to 54.7 dB (A) ❖ Night time: Core zone 58.6 to 68.4 dB (A); Buffer Zone:40.6 to 44.8 dB (A)

Water Quality (no. of locations) and results	<p>Ground Water Quality At 08 Locations</p> <ul style="list-style-type: none"> ❖ pH = 7.10 – 7.36 ❖ Total Hardness = 420 - 570 mg/l ❖ Chlorides = 93 - 405 mg/l ❖ Fluoride = 0.65 – 1.38 mg/l ❖ Heavy Metals (Zinc) = <0.02 – 0.2 mg/l <p>Surface Water Quality At 08 Locations</p> <p>pH: 7.18 to 7.63; DO: 4.5 to 5.3 mg/l; BOD:2 to 3 mg/l ; COD: 11 to 19mg/l</p>
Soil Quality (no. of locations) and results	<p>Soil Quality 8 Locations</p> <p>Moderate fertility</p> <ul style="list-style-type: none"> • pH Value of 1:2 aqueous extract Solution - 7.80 – 8.25 • E.C, mS/cm of 1:2 aqueous extract Solution - 0.138 - 0.716 • Mineralized Nitrogen (Available Nitrogen) , kg/ha - 36 – 325 • Available Phosphorous as P2O5, kg/Ha - 07 – 77 • Available Potassium as K2O, Kg/Ha - 47 – 960 • Organic Carbon, % - 0.1 – 0.64
Hydro geological study and results	<p>Mellacheruvu Mandal which is falling in the study area has Groundwater availability for both the command and non-command area put together as 10980 ha.m. The groundwater utilization is 1215 ha.m and the balance available as 9765 ha.m. Hence the stage of groundwater development for the Mellacheruvu Mandal is estimated as 11% and falls under the Safe Category.</p> <p>No Ground water tapping and Recharging ground water table by converting mine pit into reservoir.</p>
Traffic study (no. of locations) and results	<p>The limestone from mine face will be transported by 40 tons capacity dumpers to crusher of 1350 TPH capacity & 850 TPH located within cement plant area in Choutapalli Limestone Mine of MHIPL at a distance of 4 km (both ways) from the farthest mine pit to crusher. The crushed limestone will be transported to cement plant through closed belt conveyor.</p>

xiii. Public Hearing (PH) Details

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	28.07.2023 “The New Indian Express” (English News Paper) and “Eeenadu” (Telugu News Paper).
Date of PH	31.08.2023 by Telangana State Pollution Control Board chaired

Venue	Near the existing mine lease area, Choutupalli & Mellacheruvu Villages, Mattampalli & Mellacheruvu Mandals, Suryapet District, Telangana.
Chaired by	Sri. S. Venkata Rao, IAS, Collector & District Magistrate, Suryapet District, Telangana.
Main issues raised during PH	<ul style="list-style-type: none"> • Prefer Employment to locals • Drainage system to be developed in choutapalli • Development of schools in villages • Women to be trained in tailoring by setting up training centre • Roads to be repaired • Medical camps to be arranged • Plantation to be taken up I village
Budget proposed for addressing issues raised during PH over 3 years	MHIPL has allotted Rs. 55.0 Lakhs towards the Public Hearing demands.

Details of public hearing action plan for 3 years.

Activities		Capital cost (Lakhs)		Recurring cost (Lakhs/annum)		
S. No	Activity	Year 23-24	Year 24-25	Year 25-26	Total Rs In Lakhs	
Swachh Bharat						
1	Repair of drainage system in Choutapalli village	Physical Nos @Village	1 Choutapalli	1 Choutapalli	1 Choutapalli	9.0
		Budget Rs Lakhs	3	3	3	9.0
Education and Sports						
1	Development of the schools in surrounding 3 villages	Physical Nos @ Village	1 Mellacheruvu	1 Yepalmadaram	1 Choutapalli	3
		Budget Rs Lakhs	9	9	9	27*

Women welfare						
1	Women training – Tailoring and providing sewing machines	Physical Nos	1	2	1	
		@Village	Mellacheruvu	Yepalmadaram Mattapalli	Choutapalli ,	
		Budget Rs Lakhs	20	20	10	50*
Roads development						
1	Repairing of roads in villages	Physical Nos	1	1	-	
		@Village	Choutaplli	Mellacheruvu		
		Budget Rs Lakhs	5	5		10
Skilldevelopment						
1	Skill development for 30 youth for 3 years from each village	Physical Nos				
		@Village	Choutaplli	Mellacheruvu	Yepalamadaram	
		Budget Rs Lakhs	9	9	9	27
Health care						
1	.Medical camps special to be conducted	Physical Nos	1	1	1	
		@Village	Choutaplli	Mellacheruvu	Yepalamadaram	
		Budget Rs Lakhs	2	2	2	6
					55	

xiv. 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	18.11.2016

Consent to Operate	23.07.2021 valid up to 30.06.2026.
Certified Compliance Report and Inspection date	File No: 1-25/2023/IRO-HYD/857 dated 19.10.2023
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	23.11.2023 (submitted by PP)

xv. Rehabilitation & Resettlement:

R & R details	The PP submitted that R&R is not applicable to the instant project.
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xvi. Court case details:

Court Case, No and its present Status	No Litigation case is pending against the proponent. MHIPL has not received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts. However, a case has been filed against the Telangana Pollution Control Board in the Hon'ble High Court of Telangana W.P.No.23937 of 2023 praying for cancellation of Public Hearing. In which MHIPL is a respondent. However, the Court dismissed the plea and instructed to continue the PH through an Interim order.
Undertaking by PP w.r.t court case	PP submitted that no litigation is pending against the project.

xvii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The PP has submitted an undertaking by way of Affidavit dated 29.11.2023 stating that My Home Industries Private Limited shall comply with all the the statutory requirements and judgement of Hon'ble Supreme Court dated 02 nd August 2017 in Writ Petition (Civil) no. 114 of 2014 in the matter of Common Cause versus union of India and ors
Undertaking by PP in EIA/EMP report	PP has submitted an undertaking dated 24.11.2023 in the Final EIA Report that the conditions laid in ToR by SEIAA has been addressed in the Final EIA Report.
Undertaking by Consultant in EIA/EMP report	The Consultant has submitted an undertaking dated 27.11.2023 stating that

	it has complied all the prescribed ToR issued by SEIAA in the Final EIA/EMP Report.
Plagiarism Certificate	Consultanat has submitted plagiarism certificated dated 27.11.2023 in the Final EIA Report

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

Activities	Capital cost (Lakhs)	Recurring cost (Lakhs - up to lease period 2067)
Air Pollution Control Measures - Dust Suppression Measures (Atomized Water spray system and water tankers)	30	20
Environmental Monitoring	0	9.62
Greenbelt development	4.26	3.2
Construction of retaining wall 1088 m - Rs 150/m	1.65	-
Construction and Maintenance of garland drain-1088 m –cost of proclainer per hour for 5m length of garland drain is Rs 600 per hour	1.3	0.5
Construction of settling tank and De-silting operations	2.0	0.5
Occupational Health	2.15	1.35
Total (Lakhs)	41.38	35.17

xix. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	Capital Cost of EMP: Rs. 41.38 Lakhs Capital cost of Public hearing: Rs.55 Lakhs
Project Cost	100
Employment (No.s)	Existing employment - 27 persons additional employment -43 persons

3. Observation and Recommendation of the EAC:

The PP/EIA Consultant presented the KML file to indicate the site features in the vicinity of the mine lease area and the study area of 10 km radius. The PP showed the boundary of the mine lease area and cement Plant supported by Choutapalli Limestone Mine-II. The EAC noted that the PP has obtained the mining lease from Telangana State vide G.O. Ms.No. 75 on 20-12-2016 for 50 years from 03.01.2017 to 02.01.2067 over an area of 156.586 Ha. (Non Forest Land) consist of 151.163 Ha-Private Agriculture Non-irrigated land and 5.423 Ha is Govt. waste land). The Mine lease was executed vide

Proc.No..5115/ML/LS/2012 dated 03.01.2017. The PP has obtained the No Forest involved letter from DFO, Forest Department, Suryapet , dated 11.05.2023.

The instant mine had already obtained the Environmental Clearance for 2.72 MTPA (Limestone) from MOEFCC No. vide F.No. J-11015/445/2013-IA-II(M) dated: 14.10.2016. The mine is under operation since 22.02.2018. The PP has obtained the revised mine plan for the instant mine vide Lr.No. AP/KNL/MP/LST-74/ HYD dated 07.03.2023. The PP has obtained the certified compliance report from MOEFCC, Hyderabad vide F.No. 1-25/2023/IRO-HYD/857 dated 23.11.2023.

The PP after collecting the baseline data in Winter Season i.e. from December 2022 to February 2023 conducted the public hearing on 31.08.2023. PP informed to the committee that the afforestation has been carried out in 3.45 ha (3327 saplings) after spending budget of Rs. 6.654 lakh.

EAC noted that the PP has reached a maximum production capacity of 0.72 MTPA against the granted EC capacity of 2.72 MTPA, the committee emphasized that PP needs to achieve the existing EC capacity first before seeking the expansion. EAC also noted that the Limestone is transported to the crusher by 40-ton dumpers from the mine pit to the crusher and then to the cement plant through a closed conveyor for its captive use. The said crusher is located in the adjacent mine lease. Accordingly, the EAC asked the PP to explore the possibility of installing the mobile crushers within the ML area instead of using the crusher located outside the instant lease area.

The committee further observed the presence of an irrigation canal passing adjacent to the ML area, and asked the PP whether it has obtained any NoC from the State Irrigation Department and has it conducted in vibration study that may impact the existing canal. The PP informed that they have not obtained any, EAC accordingly advised the PP to get NoC from the State Irrigation Department. The EAC emphasized that blasting activities within the mine lease area should n't impact existing canal infrastructure, the committee therefore asked the PP to conduct the blasting study for the same. Committee also asked the PP to increase their greenbelt cover by planting native fruit bearing trees within the ML area with the survival rate of 95% the native fruit bearing tree species.

The EAC enquired about the wildlife conservation plan . The PP informed that it is being initiated in light of the recent amendment in the Wildlife act which has resulted in incorporation in new schedule –I species. Accordingly, EAC asked the PP to prepare the species specific conservation plan and submit it as soon as possible.

After detailed deliberations made by the PP and the EIA Consultant, the EAC opined that PP shall achieve the maximum granted capacity as per their existing EC before seeking expansion. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The PP needs to achieve the previously issued EC capacity of 2.72 MTPA before seeking an expansion from 2.72 to 5 MTPA of limestone production.
- ii. The PP should explore the possibility for the incorporating mobile crushers within the ML area and submit a detail plan;
- iii. PP should submit the plan for making rainwater harvesting facility within/outside the ML area and for the near villagers.
- iv. PP needs to conduct the blasting study in order to find the impact upon the existing irrigation canal passing through the ML area.
- v. PP needs to submit the NoC from the irrigation department.
- vi. PP should prepare the species specific conservation plan & submit the proof of submission of conservation application.

1.3 Pipariya Mal Bauxite Block (e-auctioned) with production capacity of 797462.90 TPA (ROM) in the Mine lease area of 273.215 Ha by M/s Anand Mining Corporation located at Village Pipariya Mal, Taluka Bajag, District Dindori (Madhya Pradesh) – For Terms of Reference (ToR) reg. [F. No. IA-J-11015/6/2024-IA-II(NCM), Online Proposal No. IA/MP/MIN/458118/2024, EIA Consultant - Amlinka Solutions & Technologies Pvt. Ltd.]

The instant proposal is for Terms of Reference (ToR) for Pipariya Mal Bauxite Block (**e-auctioned**) with production capacity of 797462.90 TPA (ROM) in the Mine lease area of 273.215 Ha by M/s Anand Mining Corporation located at Village Pipariya Mal, Taluka Bajag, District Dindori (Madhya Pradesh).

2. The details of the project as ascertained from the document submitted by the PP 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” of the schedule of the EIA Notification, 2006 as the mine lease area is 273.215 Ha which is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 22° 42' 54.233" to 22° 44' 19.353" North and Longitude: 81° 15' 48.455" to 81° 17' 9.117" East. The mine lease area falls under the Survey of India Toposheet No: 64F/06 and falls in Seismic Zone-II.
- iii. Details of Mine Lease in chronological manner:

S. No.	Prospecting License/ Letter of Intent (LoI) / Grant of Mine lease and Lr No	Date of The Grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	LOI granted vide letter No F3-3/2022/12/2 Bhopal	23.08.2022	Bauxite	50 Years	State Government -Madhya Pradesh	273.215

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

Private land	137.75 ha
Government land	86.355 ha (Non-Forest Land)
Forest land	49.29 Ha
Total Mining lease area (MLA), ha	273.215

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	E 5179 MCDR-MPC0BXT/3/2023-JBP-IBM_RO_JBP
	Date	30/06/2023
	Mineral & (Major/ Minor)	Major
	Mine Lease Area, Ha	273.215
	Validity	Five years
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized	
Drilling/Blasting	Drilling & blasting is required for excavation of the material.	
Geological Reserves (tons)	50018661.10; (Bauxite 47786630.60; Laterite 2232030.50)	
Mineable Reserves (tons)	23637090; (Bauxite 22395902.00; Laterite 1241188.00)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Top Soil –Nil, Mineral Reject / Waste -267907	
Life of mine	50 year (Till lease period)	
Mine Bench Height & Bench Width	2.5 meter to 5 meter Bench height & 5.0 meter to 8 meter Bench width	
No. of Mine Benches	2	
Existing Depth, m bgl	Not Applicable.	
Ultimate Depth of Mining, m bgl	10 mbgl	
Ground Water Table, m bgl	5-10	
Details of ground water intersection	GWT varies from 892 - 897 mRL whereas working will be done upto 905 mRL	
Individual bench slope	80°	
Overall pit slope	65°	
Details of existing/ proposed Crusher	Not Applicable.	
Mineral Beneficiation	No Beneficiation is proposed. Sorting sizing and screening by portable screen/ vibratory screen will be done.	
RoM output size	Less than (-130 mm)	

Transportation details including capacity of dumper/tipper, mode of transport and distance	Transportation and Haulage Equipment's					
	Sl. No.	Type	Make	Capacity (m3)		
	1.	Dumpers	Tata	16.00		
	Mineral will be transported to industries located in Madhya Pradesh and Chattishgarh via road within distance of 300kms.					
Generation of Topsoil/OB & its Management during plan period & conceptual period	No Topsoil/OB will be generated at site during plan period & conceptual period.					
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	The year wise mineral reject detail & dumping area as mentioned below.					
S.N	Year	Type of Dump	Proposed Area (ha)	Height (in m)	Total Dump (in Quantity)	Dump Location
1	Year 1	Mineral reject	0.28	10	28400	South Direction
2	Year 2		0.28	10	28400	South Direction
3	Year 3		0.68	10	67972	South Direction
4	Year 4		0.87	10	86680	South Direction
5	Year 5		0.57	10	56500	South Direction
Total			2.68		267952	

vi. Water requirement:

Total water requirement	20KLD	Fresh water	1.5 KLD
		Treated water	18.5 KLD
Source	Initially nearby villages and later on Mine sump water		
Permission for withdrawal/ intersection along with details of grant and its validity	Not Applicable		

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

Particulars	Particular's Name	Distance & Directions
Village	Pipariya Mall.	Adjacent to Project Site in E
Town	Bajag	8.5km in SE
Highway	Bajag-Sagartola Road (SH-9)	3.5km; E
Interstate Boundary	Madhya Pradesh Chattishgarh State border	21 km South
Railway Station/Railway line	Amlai Railway station	58km in NE
Water Bodies	Chakrar Nala	5.3km; NE
Forest	Labeda RF	Adjacent to project site in W

viii. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	Forest area is 49.29 ha. The forest committee has restricted this area as well as 50 m buffer zone comprising of 30.45 ha as restricted area and will not be mined out.
National Park	No	Not present within 10 km radius
Wildlife Sanctuary	No	Not present within 10 km radius
Elephant/Tiger Reserve	No	Not present within 10 km radius
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	Not present within 10 km radius
Coastal Regulation Zone (CRZ)	No	Not present within 10 km radius
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	Will be part of EIA report
Wildlife Conservation Plan	Yes	Will be part of EIA report

ix. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	39.30 ha (Tree species will be planted @ 2000 saplings per ha)
Budget for green plant & plantation till the end of life of mine.	Will be part of EIA report
Budget for nursery	Will be part of EIA report
Details of existing plantation and its survival rate	It is fresh case not applicable
No. of tree cuts in the mine lease area and compensatory afforestation	Will be part of EIA report
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	7.30 ha
50 m safety zone of nallah, roads, electric lines	0 ha
500 m safety zones of nearest habitation villages	32 ha

x. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	December 2023 to February 2024
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter
Predominant Wind direction (From)	North-west to south east

Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	12(6 Surface water and 6 ground water)
Soil Quality (no. of locations) and results	5
Hydro geological study and results	0
Traffic study (no. of locations) and results	2

xi. Rehabilitation & Resettlement (R&R):

R & R details	PP will submit the details in the EIA/EMP Report.
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xii. Court case details:

Court Case, No and its present status	No court case
Undertaking by PP w.r.t court case	No court case

xiii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	This is a case of fresh grant sanctioned through auction.
Undertaking by PP in EIA/EMP report	Not applicable at TOR stage
Undertaking by Consultant in EIA/EMP report	Not applicable at TOR stage
Plagiarism Certificate	Not applicable at TOR stage

xiv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	PP will submit in EIA report
Project Cost	INR 7.11 crore
Employment (No.s)	27 person

3. Observation and Recommendation of the EAC: -

The PP presented the KML file wherein within the ML area it showcased five blocks in the proposed Pipariya Mal Bauxite mine intended for mining the mineral. The PP stated that they will not be mining in areas that has been designated as restricted area since these areas are Forest land. The PP submitted the valid Lol issued for grant of ML by Mineral Resources Department, Govt of M.P. through e-auction for a period of 50 years. The Lol is valid for 3 years. The Mining Plan has also been approved by IBM.

Committee noted that the forest land of 49.29 ha along with the buffer zone of 30.45 ha lying within the ML area declared as restricted area is Forest land and asked the PP to either submit an application for obtaining the forest clearance for forest land of 49.29 ha lying within the ML area or exclude the forest land from the total ML area. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. PP needs to submit the proof of submission of forest clearance application for the 49.29 ha of forest land lying within the ML area of 273.215 ha or revise the Mine area after excluding the forest land.
- ii. Accordingly, PP needs to submit the revised application and all relevant documents.

1.4 Amendment in Environment Clearance dated 06.09.2023 of Chromite Block (ML Area: 406 ha) located at Villages: Kalarangiatta, Kaliapani & Mahulkhal, Forest Block-27, Tehsil: Sukinda, District: Jajpur, Odisha of M/s. Tata Steel Mining Ltd. [F. No. IA.J-11015/96/2011-IA. II (NCM), Proposal No. IA/OR/MIN/454734/2023, EIA Consultant - JM Enviro Net Pvt. Ltd.]

1 The instant proposal is for Amendment in Environment Clearance dated 06.09.2013 & 11.01.2022 of Chromite Block (ML Area: 406 ha) located at Villages: Kalarangiatta, Kaliapani & Mahulkhal, Forest Block-27, Tehsil: Sukinda, District: Jajpur, Odisha of M/s. Tata Steel Mining Ltd

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

- i. The mine lease area is located between Latitude 21° 00'39.60" N to 21° 02'05.81" N and Longitude 85° 44'27.10" E to 85° 46'22.37" E. The mine lease area falls under the Survey of India Toposheet No: F45N12 (73-G/12), F45N16 (73-G/16), F45T9 (73-H/9) & F45T13 (73-H/13) and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2(b) Mineral beneficiation. The project falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- iii. PP has obtained the Environmental Clearance for Chrome ore (0.95 to 2.4 MTPA), Pyroxenite ore (0.25 to 0.5 MTPA-RoM) and Chrome beneficiation production (0.1 to 0.65 MTPA) vide letter no. J-11015/96/2011-IA.II(M) dated 06.09.2013.
- iv. The PP thereafter obtained first amendment in EC vide letter no J-11015/96/2011-IA-II (M) dated 26.09.2016 wherein "enhancement of chrome beneficiation production from .1 to 0.65 million TPA (throughput)" was replaced with "enhancement of chrome beneficiation production from .1 to 0.65 million TPA".
- v. Thereafter on 11.01.2022 transfer of EC was obtained from "M/s Tata Steel Limited" to "M/s Tata Steel Mining Limited" under the provisions of S.O. 2817 (E) dated 13.07.2021.
- vi. Details of Mine Lease in chronological manner:

As per MMDR, Act 2015 the mine lease in the name of Tata Steel Ltd. was expired. Tata Steel Mining Ltd. has taken this lease through e-auction and same was

executed on 23.07.2020. As per the lease document , the mine lease was only issued for Chromite ore block of 406 ha.

S. No.	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Mine lease deed was granted in favor of the Tata Steel Mining Ltd.	23.07.2020	22.07.2070	Chromite	406 ha

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

Private land	1.331 Ha
Government land	-
Forest land	404.669 Ha
Total Mining lease area (MLA), ha	406 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	NA

viii. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	BBS/JJP/CR/2172/MPM/2022-23
	Date	22.07.2022
	Mineral & (Major/Minor)	Major
	Mine Lease Area, Ha	406 Ha
	Validity	2022-23 to 2024-25
Mining Parameters	Quantitative Description	
Method of Mining	Opencast with Shovel and dumper combination Underground: Sublevel stopping with backfilling	
Drilling/Blasting	<p>Drilling: Drilling is being/will be done with sharp drill bits to achieve optimum drilling performance and to reduce noise generation at source.</p> <p>Blasting: Blasting techniques like presplit blasting, use of Nonel, SME (Site Mixed Emulsion) is being/will be practiced to minimize vibration, back breaks and fly rock generation.</p> <p>Blasting is being/will be done as per standards prescribed by DGMS Use of NONEL to control ground vibrations Monitoring of every Blast</p>	
Geological Reserves	91 Million Tonnes as on 01.04.2022	
Mineable Reserves	4.51 Million Tonnes as on 01.04.2022	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Chromite Ore: 2.4 million TPA No topsoil generation is envisaged during the plan period.	

	No Mineral reject generation is envisaged during the plan period as mineral (Cr ₂ O ₃) above threshold value of 10% is being used. OB generation: 16.60 million TPA
Life of mine	6 years for opencast mine For underground, the life of the mine is planned till 2070
Mine Bench Height & Bench Width	Bench height: 10 m Bench Width: 10-11m
No. of Mine Benches	16
Existing Depth, m bgl	150m
Ultimate Depth of Mining, m bgl	180 m
Ground Water Table, m bgl	The water table occurs at a depth of 4 m to 9 m
Details of ground water intersection	Yes,
Individual bench slope	< 70 deg
Overall pit slope	< 35 deg
Details of existing/ proposed Crusher	No proposal
Mineral Beneficiation	0.65 MTPA
RoM output size	0 mm to 150 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The raw material is being/will be loaded and sent to the stackyard by dumpers/tippers of 30 tonne – 60 tonne capacity and Minerals being/ will be transported by truck from conc. Stack pile to ferro alloy plant by road.
Generation of Topsoil/OB & its Management during plan period & conceptual period	During the plan period 14.42 Million CuM of waste material will be generated and backfilled in OB-II quarry within an area of 50.85 ha. At conceptual stage 25.5 Million CuM of waste material will be generated and same will be used for backfilling purpose.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	No topsoil generation is envisaged during the plan period. No Mineral reject generation is envisaged during the plan period as mineral (Cr ₂ O ₃) above threshold value of 10% is being used.

ix. Water requirement:

Total water requirement	3350 KLD	Fresh water	0
		Treated water	3350
Source	<i>Mines recycled water after treatment at ETP</i>		
Permission for withdrawal/ intersection along with	5643 KLD was permitted vide NOC No CGWA/NOC/MIN/ORIG/2018/3161, Dated 23.03.2018. The same NOC was vested to Tata Steel Mining Limited for two years. We have already applied for fresh NOC.		

details of grant and its validity	
Additional information (if any)	NOC for Ground Water Withdrawal from CGWA was obtained dated 13.03.2018. Application for Groundwater withdrawal & intersection was submitted to the CGWA, Vide APPI No. 21-4/4977/OR/MIN/2023, dated 05.05.2023

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	<ul style="list-style-type: none"> • Forest Clearance for 73.697 ha vide letter no 8-78/96-FC dated 27.01.1998. • Forest Clearance has been obtained for 404.669 ha (330.972 ha in addition to already diverted forest land 73.697 ha) vide letter no 8-15/2016-FC dated 18.05.2018. • In order to incorporate the common boundary working provision in the Mine Plan, Tata Steel Limited modified the mine plan and got it duly approved by Indian Bureau of Mines, Bhubaneswar vide letter BBS/JJP/CR/2172/MPM/2022-23, dated 22.07.2022. • An intimation of the modification in the mine plan along with the copies of the modified mine plan, was submitted to office of IRO, MoEF&CC as per the process vide letter number TSML/MD/3887/FY23. • However, to be on the safe side Tata Steel limited also applied for the change in land use pattern through the Parivesh portal as per MoEF&CC OM dated 1st November 2022, vide proposal no. FP/OR/REDIV/444442/2023.
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	As per authenticated list of flora and fauna from DFO Vide Memo No. 1324/5F(Misc.)/2011, dated 11.03.2011. There are two schedule-I species i.e. <i>Elephasmaximus</i> and <i>Varanusbenghalensis</i> .
Wildlife Conservation Plan	Yes	This proposal is for Amendment in EC. Conservation Plan for both schedule-I species i.e. <i>Elephasmaximus</i> and <i>Varanusbenghalensis</i> has been prepared.

xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	During the plan period, Greenbelt/plantation will be carried out on 10 Ha area (OB II back fill) and 25000 saplings will be planted @ 2500 saplings per Ha. At the conceptual stage, Greenbelt/ plantation will be carried out up to a total area of 260.32 Ha area (On Backfilled Area: 192.47 Ha, Stabilization of waste dump: 48.17 Ha & along the 7.5m ML Periphery: 19.68 Ha) with total number of Saplings up to: 6,50,800 @ 2500 saplings per Ha.
Budget for green plant & plantation till the end of life of mine.	At conceptual stage 13.01 Crore INR @ 200 per sapling. During the plan period 50 Lakh INR @ 200 per sapling.
Budget for nursery	2 Lakh INR per Year
Details of existing plantation and its survival rate	About 39 ha of area was afforested and a survival rate of more than 85% is achieved.
No. of tree cuts in the mine lease area and compensatory afforestation	No of trees cutting: 1375 An area of 0.7 ha will be afforested @ 2500 per ha of saplings
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	19.68 ha

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 Establish	Vide letter no. 17750/IND-II-NOC-5664 Valid up to 29.09.2018		
Consent to Operate	Vide letter no. 17340/IND-I-CON-226 dated 06.11.2023 Valid up to 31.03.2024		
Certified Compliance Report and Inspection date	The PP has submitted the certified compliance report issued by the Regional Office (RO), Bhubaneswar. Site visit was conducted by RO on 02.08.2023.		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	S. No.	Month	Chrome Ore Production (ROM)
	1.	July 2020	-
	2.	Aug 2020	-
	3.	Sep., 2020	-
	4.	Oct., 2020	36596.097

	5.	Nov., 2020	86961.984	
	6.	Dec., 2020	151514.869	
	7.	Jan., 2021	208300.000	
	8.	Feb., 2021	237305.000	
	9.	March 2021	81175.788	
	10.	April 2021	190170.395	
	11.	May 2021	180170.210	
	12.	June 2021	112564.000	
	13.	July 2021	85350.000	
	14.	August 2021	78135.000	
	15.	Sep., 2021	5805.000	
	16.	Oct., 2021	47411.950	
	17.	Nov. 2021	126132.008	
	18.	Dec., 2021	145403.865	
	19.	Jan., 2022	140169.141	
	20.	Feb., 2022	120541.794	
	21.	March 2022	128132.757	
	22.	April 2022	149480.210	
	23.	May 2022	160225.245	
	24.	June 2022	151538.127	
	25.	July 2022	108294.123	
	26.	August 2022	40125.480	
	27.	Sep., 2022	40546.450	
	28.	Oct., 2022	50280.210	
				<i>Source: Deputy Director of Mines, Jajpur Road Circle</i>

xiii. Court case details:

Court Case, No and its present status	A case filed by Tata Steel Mining Limited (Now merged with Tata Steel Limited) against the penalty raised by State Government against non-compliance of mineral dispatch requirement under Mine Development and Production Agreement (MDPA).
Undertaking by PP w.r.t court case	PP submitted an undertaking dated 04.02.2024 stating that there is only one court case pending against the project i.e. case filed by Tata Steel Mining Limited (Now merged with Tata Steel Limited) against the penalty raised by State Government against non-compliance of mineral dispatch requirement under Mine Development and Production

	Agreement(MDPA). Beside this, no other direction /order passed by any Court of Law against the project and/or land in which the amendment of the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company
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xiv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP submitted an affidavit dated 27.09.2023 to comply all the statutory requirement and judgement of Hon'ble Supreme Court order dated 02.08.2017 in the WPC 114 of 2014 in the matter of Common Cause versus Union of India & Ors.
Undertaking by PP in EIA/EMP report	Not applicable, as this proposal is for amendment in EC
Undertaking by Consultant in EIA/EMP report	
Plagiarism Certificate	

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Water pollution, control, management & conservation, Air pollution, control and management, Ecology and Biodiversity, Social Aspects (Awareness Programmes), PH Action Plan (CSR Activities)	9.6	310

xvi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	Existing Capital cost for EMP 9.6 Crore
Project Cost	Project cost is Rs. 299 Crore
Employment (No.s)	1029

3. Observation and Recommendation of the EAC:

The EAC noted that the instant proposal is for amendment in Specific Condition No. xviii of the EC dated 06.09.2013, 26.09.2023 & 11.01.2022 w.r.t to mining within 7.5 m periphery of safety zone of Mine Lease along the part of ML boundary common with adjoining lessee.

The PP has informed the EAC that initially Environmental Clearance (EC) was obtained on 06.09.2013 for enhance of production of chrome ore from 0.95 to 2.4 million TPA and Pyroxentite ore mining from 0.25 to 0.5 million TPA (ROM) and enhancement of

chrom beneficiation production from 0.1 to 0.65 million TPA (throughput) in favour of M/s Tata Steel Limited. The first amendment was obtained on 26.09.2016 wherein wherein *“enhancement of chrome beneficiation production from .1 to 0.65 million TPA (throughput)”* was replaced with *“enhancement of chrome beneficiation production from .1 to 0.65 million TPA”*. Thereafter in accordance with MMDR, Act 2015 the mine lease in the name of M/s Tata Steel Ltd. expired. The M/s Tata Steel Mining Ltd. has taken the instant lease through e-auction and same was executed on 23.07.2020. As per the lease document , the mine lease was only issued for Chromite ore block of 406 ha.

After obtaining the lease in name of M/s Tata Steel Mining Limited, the PP obtained transfer of EC 11.01.2022 from “M/s Tata Steel Limited” to “M/s Tata Steel Mining Limited” under the provisions of S.O. 2817 (E) dated 13.07.2021. PP has also submitted the online acknowledgement generated in this regard through Parivesh Portal. EAC noted that as on date the EC is in the name of M/s Tata Steel Mining Limited whereas application has been made by M/s Tata Steel Limited without transfer of EC in its name.

The PP thereafter presented the KML file and indicated the location of proposed mining site on the 7.5 m periphery of safety zone of Mine Lease which adjoins with the another ML area of M/s Jindal Stainless Ltd. The adjoining area of M/s Jindal Stainless Ltd. is having valid EC dated 04.04.2022 issued under violation category from SEIAA, Bhubaneswar. PP also informed that they have obtained the approval of IBM Bhubaneswar on 22.07.2022 with regard to the revised mining plan for undertaking mining in the common boundary . Further PP informed that they have obtained the permissions from DGMS vide letter dated 06.06.2022 for working in common mine boundary area of two mine. The EAC also asked the PP whether a SOP has been formulated for undertaking the mining . The PP informed the committee that Standard Operating Procedure (SoP) has been already been prepared and they have signed an agreement for complying the conditions for mining upon common boundary between Sukinda Chromite Mine of M/s Tata Steel Mining Limited & Jindal Chromite mine of M/s Jindal Stainless Limited. The EAC accordingly requested the PP to submit the SOP. EAC enquired whether any Slope stability study has been undertaken by the PP. The PP informed that they have conducted a scientific study with regard to slope stability in the year 2022.

The EAC noted that the PP has submitted the certified compliance report dated 01.11.2023 after site visit conducted on 02.08.2023. The EAC observed few non compliances in CCR and accordingly, asked the PP to submit the closure report from the Regional Office.

The EAC noted stated that upon auction PP only obtained lease for mining of chromite ore accordingly, the EAC stated that PP should not exceed the permitted production capacity granted vide EC dated 06.09.2013 for Chrome ore from 0.95 to 2.4 MTPA. The EAC also stated that there shall be no change in the mining methods/technologies and PP shall adhere to existing practices for the common boundary mining. The EAC asked the PP to undertake compensatory green belt development to compensate the loss in plantation due to mining in the common boundary, The PP informed

that they will plant trees in 0.88 ha of land in lieu of the area of 7.5m boundary proposed for common boundary mining.

Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:

- i. The PP needs to submit the copy of approved SOP during extraction of common boundary .
- ii. PP needs to obtain transfer of EC before seeking amendment in the existing EC.
- iii. PP needs to submit scientific study of slope stability that it undertook with regard to common boundary mining.
- iv. PP needs to submit the action taken/closure report with regard to the non-compliances in CCR.

Day 2: 21st February, 2024 (Wednesday)

2.1 Expansion of Ramco Budawada Limestone Mine for enhancement in production capacity from 1.1 to 2.5 MTPA in the mine lease area of 160.0 ha by M/s The Ramco Cements Limited located at Village Budawada, Taluk Jaggayapeta, District NTR (Earlier Krishna), Andhra Pradesh –Reconsideration for Environmental Clearance reg. [F. No. IA-J-11015/443/2014-IA-II(NCM), Online proposal No. IA/AP/MIN/25556/2014, EIA Consultant -B.S. Envi – Tech Pvt. Ltd]

1. The instant proposal is for expansion of Ramco Budawada Limestone Mine for enhancement in production capacity from 1.1 to 2.5 MTPA along with 1200 TPH crusher in the mine lease area of 160.0 ha with by M/s The Ramco Cements Limited located at Village Budawada, Taluk Jaggayapeta, District NTR (Earlier Krishna), Andhra Pradesh.

2. The details of the project as ascertained from the documents submitted by the PP 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 Interstate Boundary of Andhra Pradesh – Telangana is located at a distance of 1.5km, W from the mine lease area and hence appraised at the Central level.
- ii. The mine lease area is located between Latitude 16°51'17.3" N to 16°52'10.29" N and longitude 80°03'46.9" E to 80°05'31.7" E. The mine lease area falls under the Survey of India Toposheet No 65/D/1 and falls in Seismic zone-III.
- iii. Details of previous Environmental Clearance (EC):
 - a. The PP obtained EC vide letter dated 10.02.2009 for Budhwada Limestone Mine for production capacity of 1.10 MTPA over an area of 160 ha in favour of M/s Madras Cements Ltd.
 - b. Transfer of Environmental Clearance issued on 28.04.2023 from M/s Madras Cement Ltd to M/s The Ramco Cements Limited.
 - c. Amendment of EC dated 10.02.2009 has been obtained on 07.08.2023 w.r.t establishing Railway siding facility with stacker &reclaimer facility within the

Mining lease area and to permit transportation of limestone from mine to the cement plant by road as well as by railway line for Budhwada Limestone Mine (ML area 160 Ha and production capacity 1.10 MTPA).

- d. Terms of Reference (ToR) was issued on 29.07.2015 for Budhwada Limestone Mine for enhancement in production capacity of Limestone from 1.1 MTPA to 2.5 MTPA in the mine lease area of 160.0 ha by M/s The Ramco Cements Limited.

iv. Details of previous EAC meetings:

- a. Earlier, the proposal was considered in the EAC meeting held during 19-20th September, 2016 wherein the EAC deferred the proposal for want of requisite information. Then, the PP submitted the information on 14.09.2017 through Parivesh portal.
- b. Further, the proposal was considered in the EAC meeting held during 23-24th October, 2017 wherein the EAC was of the view that only 10% of the production has been achieved and proposal for expansion could not be justified by the PP. The Committee also observed that the PP did not develop the green belt around the Mining lease, which is one of the conditions of the earlier EC. PP submitted that they could not develop the green belt and achieve their rated production as they did not get permission from the other nearby mining lease owners to use the area under their control to approach their mining lease and due to this the production is less. PP also submitted that they are in process of resolving the issue pertaining to approach road. Therefore, the Committee decided to defer the proposal and instructed the PP to take steps to fulfil the conditions stipulated in earlier EC and resolve the issues pertaining to approach road. Then, the PP submitted the information on 10.08.2023, 26.10.2023 and 07.11.2023 through Parivesh portal.
- c. The proposal was further considered in the 23rd EAC meeting (Non-Coal Mining) held during 5-7th December, 2023 wherein the proposal was deferred due to the shortcomings observed by the EAC.

v. Details of Mine Lease in chronological manner:

S.No.	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	G.O.Ms.No.291,G.O.Ms.No.59 & G.O.Ms.No.39	30.10.2008, 02.05.2017 & 03.06.2021	Limestone (Major)	20 years and extended upto 50 years as per MMDR	Govt. of Andhra Pradesh	160 Ha

				amendment Act,2015		
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S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Proceeding.No.436/M/2001 dated 17.03.2009	17.03.2009	16.03.2029	Limestone	160 Ha
2	Proceeding No.436/M/2001 dated 01.12.2022	17.03.2009	16.03.2059	Limestone	160 Ha

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

Forest land	160 Ha
Total Mining lease area (MLA), ha	160 Ha
Additional information (if any)	Entire lease area falls under Budawada Reserve forest in Jaggayapet Mandal, N.T.R district , Andhra Pradesh.

vii. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	AP/KSN/MP/LST-30/HYDR
	Date	21.04.2023
	Mineral & (Major/Minor)	Major
	Mine Lease Area, Ha	160 Ha
	Validity	31.03.2024.
Mining Parameters	Quantitative Description	
Method of Mining	Mechanized open-cast mining method with conventional deep hole drilling and blasting,	
Drilling/Blasting	Deep hole Drilling and Controlled Blasting	
Geological Reserves	215.00 million tonnes as on 31.01.2023	
Mineable Reserves	134.06 million tonnes as on 31.01.2023	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total excavation -91.40 million tonnes. Limestone – 90.37 million Tonnes IB/SB/waste- 1.03 million tonnes	
Life of mine	53 years @ 2.50 MTPA However the lease period valid upto:16.03.2059.	
Mine Bench Height & Bench Width	Bench Height – 8 m to 9m Bench Width - 25 m (maximum)	
No. of Mine Benches	6 Nos	
Existing Depth, m bgl	16m	
Ultimate Depth of Mining, m bgl	48 m (17 m RL from general ground level i.e., 65 m RL)	
Ground Water Table, m bgl	45-60m bgl	

Details of ground water intersection	Grant of Permission (NOC) for water usage and to carry out mining below groundwater table and discharge of ground water obtained from Panchayat Raj & Rural Development & Administrator vide letter No. PRR05-11028/16/2019-SLNA-GIS-CORD, dated 13.02.2021. Renewal application submitted and order awaited.
Individual bench slope	75° to 80°
Overall pit slope	45°
Details of existing/ proposed Crusher	Impact crusher capacity of 1200 TPH with high efficiency Bag filters with maximum emission rate of 30 mg/Nm ³
Mineral Beneficiation	Not Applicable
RoM output size	(-)75 mm
Transportation details including capacity of dumper / tipper, mode of transport and distance	The ROM is transported to cement plant through tippers having 30MT capacity by road. Established the railway siding along with crusher, stacker & reclaimer facility. The crushed limestone is being transported through wagons.
Generation of Topsoil/OB & its Management during plan period & conceptual period	<ul style="list-style-type: none"> • A quantity of 14317 cu.m waste will be accommodated in the safety barrier area with a height of 5 m in TRCL Railway siding during this plan period. Total estimated quantity of interstitial clay is 0.44 million Cu.m to achieve production of 87.50 million tonne up to the Lease period after this modification in the aPProved mining plan period. • However the Total waste of 0.45 million cum quantity (including temporary dump qty. of 0.01 million Cu.m) will be accommodated in the safety barrier area with a height of 5 m in TRCL Railway siding and will be utilized for plantation in due course of time.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	The generation waste will be accommodated in the safety barrier area with a height of 5 m in TRCL Railway siding area and will be utilized for plantation in due course of time.

viii. Water requirement:

Total water requirement	200 KLD	Fresh water	200 KLD
		Treated water	
Source	Initially water requirement meet from other own captive mine.		
Permission for withdrawal/ intersection along with details of grant and its validity	Grant of Permission (NOC) for water usage and to carry out mining below groundwater table and discharge of ground water obtained from Panchayat Raj & Rural Development & Administrator vide letter No. PRR05-11028/16/2019-SLNA-GIS-CORD, dated 13.02.2021.		

	Renewal application submitted and order awaited.
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ix. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Village	VSP Township	1.5Km NE
Town	Jaggayyapet	4.0Km NE
Highway	NH-65(Hyderabad-Vijayawada)	7.32 Km NE
Interstate Boundary	Andhra Pradesh – Telengana Border	1.8 Km (SW)
Railway Station/Railway line	Bonakalu railway station	27Km-NE
Water Bodies	Krishna River	3.7 km – S
	Paleru River	2.2 km – E
	AntaragangaVagu	5.6 km – NW
Forest	Budawada RF	Lease area lies in Budawada RF
	Balusupadu RF	3.0 km - NW
	Jaggayyapeta Extension RF	5.3 km - E
	Venkatayapalem Extension RF	5.6 km - SE

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	Final Forest clearance under FC Act 1980 for entire lease area of 160.00 ha obtained from Ministry of Environment and Forest (FC division) vide clearance no.8-56 / 2005-FC, dated 22.12.2011 for Mining of Limestone.
National Park	No	-
Wildlife Sanctuary	No	-
Elephant/Tiger Reserve	No	-
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	-
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	No	-
Wildlife Conservation Plan	Yes	Wildlife Conservation Plan has been submitted by the PP and is under process fo approval.

xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	3.50 Ha. Area covered with plantation. However 1000 saplings proposed for gap filling for the year 2024-2025.
Budget for green plant & plantation till the end of life of mine.	5 lakhs per annum.
Budget for nursery	--
Details of existing plantation and its survival rate	Presently about 3.50 Ha of the lease area is developed with plantation. So far, about 9930 saplings have survived in the peripheral safety zone, approach road have been planted within the lease area. And survival rate is 85%
No. of tree cuts in the mine lease area and compensatory afforestation	A quantity of 769.122 Cu.M. Misc. fuel from extraction of tree growth an extent of 160 Ha of forest land, Extracted by forest department themselves. An amount of 2.83 cr. paid towards compensatory afforestation scheme to the forest department wide Demand Draft No.240763, Dated 26.06.2010
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	3.5 Ha. for barrier and no non-mineralised area available within ML.

xii. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	December 2014 to February 2015 Fresh data collected: December 2023
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter Season 2014-15 Fresh data collected: Winter Season 2023
Predominant Wind direction (From)	NNW-N-NNE Direction
Ambient Air Quality (no. of locations) and results	AAQ Parameters at 08 Locations <u>Winter Season 2014-15:</u> PM10 = 30.1 to 66.0 µg/m ³ PM2.5 = 17.1 to 39.7 µg/m ³ SO2 = 9.0 to 14.5 µg/m ³ NO2 = 6.0 to 13.3 µg/m ³ CO: less than 1 PPM <u>December 2023:</u> PM10 = 40.9 to 70.3 µg/m ³ PM2.5 = 19.8 to 32.8 µg/m ³ SO2 = 10.3 to 16.3 µg/m ³

	<p>NO2 = 11.3 to 17.2 µg/m³ CO: less than 1 PPM</p>
Noise level (no. of locations) and results	<p>Noise Levels At 9 Locations <u>Winter Season 2014-15:</u> Day time: ❖ Core zone: 62.6 dB (A); ❖ Buffer Zone:50.8 to 53.5 dB (A) Night time: ❖ Core zone 57.2 dB (A); ❖ Buffer Zone:41.3 to 44.1 dB (A) <u>DECEMBER 2023:</u> Day time: ❖ Core zone: 71.2 dB (A); ❖ Buffer Zone:50.6 to 53.6 dB (A) Night time: ❖ Core zone 64.5 dB (A); ❖ Buffer Zone:40.8 to 44.2 dB (A)</p>
Water Quality (no. of locations) and results	<p>Ground Water Quality At 08 Locations <u>Winter Season 2014-15:</u> ❖ pH = 7.48 – 8.28 ❖ Total Hardness = 220 - 457 mg/l ❖ Chlorides = 63 - 233 mg/l ❖ Fluoride = 0.36 – 1.1 mg/l ❖ Heavy Metals (Zinc) = <0.02 – 0.2 mg/l <u>December 2023:</u> ❖ pH = 7.36 – 7.90 ❖ Total Hardness = 250 - 480mg/l ❖ Chlorides = 75 - 250 mg/l ❖ Fluoride = 0.5 – 1.14 mg/l ❖ Heavy Metals (Zinc) = <0.02 – 0.2 mg/l Surface Water Quality At 07 Locations <u>Winter Season 2014-15:</u> ❖ pH: 7.19 to 8.29; ❖ Total Hardness = 242 - 442mg/l ❖ Chlorides = 75 - 249 mg/l ❖ Fluoride = 0.32 – 1.11 mg/l ❖ Heavy Metals (Zinc) = <0.02 – 0.2 mg/l <u>December 2023:</u> ❖ pH = 7.6 – 8.16 ❖ Total Hardness = 230 - 310mg/l ❖ Chlorides = 70 - 113 mg/l ❖ Fluoride = 0.72 – 0.95 mg/l ❖ Heavy Metals (Zinc) = <0.02 – 0.2 mg/l</p>

Soil Quality (no. of locations) and results	<p>Soil Quality 8 Locations</p> <p>Moderate fertility</p> <p><u>Winter Season 2014-15:</u></p> <ul style="list-style-type: none"> • pH Value of 1:2 aqueous extract Solution - 8.12 – 8.39 • E.C, mS/cm of 1:2 aqueous extract Solution – 0.19 – 0.545 • Mineralized Nitrogen (Available Nitrogen), kg/ha - 7 – 24 • Available Phosphorous as P₂O₅, kg/Ha – 16-42 • Available Potassium as K₂O, Kg/Ha – 160-340 • Organic Carbon, % - 0.12-0.7 <p><u>December 2023:</u></p> <ul style="list-style-type: none"> • pH Value of 1:2 aqueous extract Solution - 8.06-8.27 • E.C, mS/cm of 1:2 aqueous extract Solution – 0.204 – 0.43 • Mineralized Nitrogen (Available Nitrogen) , kg/ha - 12 – 32 • Available Phosphorous as P₂O₅, kg/Ha – 21-74 • Available Potassium as K₂O, Kg/Ha – 316-512 • Organic Carbon, % - 0.4-0.64
Hydro geological study and results	Safe Category
Traffic study (no. of locations) and results	None -The transportation of limestone from the mining lease to the cement plant by railway wagon, for which EC amendment is obtained.

xiii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	23.03.2016 “Indian Express” (English News Paper) and “Sakshi” (Telugu News Paper).
Date of PH	26.04.2016
Venue	Proposed Enhanced Mine lease Area, Ramco Budhwada Limestone Mine, Jaggayyapet Village, Jaggayyapet Mandal, NTR (earlier Krishna) District, Andhra Pradesh.
Chaired by	Sri Ch.Rangayya Chairman District Revenue Officer And Additional District Megistrate, Krishna District, AP.
Main issues raised during PH	➤ Preference to be given for local educated villagers. for employment in the industry.

	<ul style="list-style-type: none"> ➤ Management to carryout mining operations without causing air, water and noise pollution. Latest equipment and machinery shall be utilized during mining operations for control the pollution control ➤ Management to develop the Green Belt programme in the project area surrounding villages ➤ The industry to develop Budawada village on par with Jayanthipuram. ➤ Supply of drinking water through RO plants to surrounding villages ➤ Skill development programmes are to be implemented under CSR activities. Apprenticeship, Project work, Trainings shall be given to local educated youth and provide placements to eligible candidates. ➤ The Management for the co-operation in development of Jaggayyapeta Hospital and to adopt the hospital and provide necessary facilities.
Budget proposed for addressing issues raised during PH over 3 years	<p>TRCL has spent amount of Rs. 188.14 Lakhs towards implementation of Public Hearing Commitments for the period 2020 to 2023.</p> <p>However an additional amount of Rs.80 lakhs has been earmarked for the same in the next two years to come.</p>

xiv. 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	<p>CTE obtained vide letter No. 285/PCB/CFE/RO-VJA/HO/2009-69, Dt.08.04.2010.</p> <p>Amendment CTE order No. 285/APPCB/CTE/RO-VJA/HO/2023 dated 06.10.2023.</p>
Consent to Operate	<p>Consent for Operation (Combined CFO) issued by the State Pollution Control Board for production of 1.10 MTPA of Limestone, vide order No. APPCB/VJA/VJA/488/HO/CFO/2021, dated 07.11.2022 which is valid up to 31.01.2028.</p> <p>Amendment CTO order No. APPCB-11022/134/2021-TEC-CFO-APPCB dated 24.01.2024.</p>
Certified Compliance Report and Inspection date	<p>Certified EC compliance obtained from MoEF&CC, Regional office, Vijayawada vide file No. SO/VIJ/EPA/EC-A/101/05-86/2023 and 15.06.2023</p>

Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Authenticated past production details issued by District Mines and Geology Officer, NTR District, Department of Mines & Geology dated 07.12.2023 been submitted by PP.
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xv. Rehabilitation & Resettlement (R&R):

R & R details	PP has submitted that no R&R issues related to the ML area.
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xvi. Court case details:

Court Case, No and its present status	<p>With regards to mineral transportation in a small stretch of land owned by Rashtriyalspat Nigam Limited (RINL), writ petition was filed by RINL and its details are as follows:</p> <p><u>Writ. No. 5066 of 2019, dt.10.04.2019.</u></p> <ul style="list-style-type: none"> RINL filed writ petition on 10.04.2019 against Govt. of Andhra Pradesh and TRCL. The High Court of Andhra Pradesh issued the order on 25.04.2019 for suspension of Memo No. 11031/M.III(2)/2013, Dt. 23.05.2018 and further memo No. 11031/M.III(2)/2013, Dt. 23.01.2019. Hon'ble AP High Court was pleased to dismiss the writ petition filed by RINL on 14.06.2021 after hearing all the parties and also was pleased to vacate the interim stay granted in the matter. <p><u>RINL Writ Appeal No. 424 of 2021, dt.15.07.2021 against the judgment of writ. No. 5066 of 2019, dt.10.04.2019.</u></p> <ul style="list-style-type: none"> The above appeal was heard on 22.07.2021 and Honbl'e Chief Justice Bench has issued the orders to stop operations on road and maintain the "Status Quo" in this matter till the next date of hearing. Status Quo is maintained in RINL land. Presently an alternative transport route which is of a greater distance is being utilized.
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xvii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit dated 10.02.2024 stating that all the statutory requirements and judgements of the Hon'ble Supreme Court dated 2 nd Aug 2017 in WPC 114 of 2014 in the matter of Common Cause vs Union of India and ors shall be complied.
Undertaking by PP in EIA/EMP report	Not applicable as the proposal is for EC Amendment.

xviii. Detail of Additional Detail Sought:

The instant proposal was earlier considered in the 23rd EAC meeting(Non-Coal Mining) held during 5-7thDecember, 2023 wherein the committee deferred the proposal due to some requisite information. The PP has submitted their reply on the Parivesh portal vide letter dated 16.01.2024. Further, Ministry raised ADS on 25.01.2024 and reply has been submitted on 01.02.2024. The ADS points and the reply of PP are as follows:

S · N o	ADS Point	Reply by PP
ADS dated 25.01.2024		
1	The matter has been examined in the Ministry and it is found that the PP has carried out the revalidation of baseline data only for ambient air quality. Hence, the PP is requested to submit the revalidation of baseline data for noise level, water quality and soil quality with the comparison of both old and new data along with certified test reports.	The baseline data for ambient air quality, noise level, water quality and soil quality is being submitted with the comparison of both old and new data along with certified test reports.
ADS dated 18.12.2023		
1	The PP needs to revise the information and data in the technical presentation as per the current scenario.	The PPT is being updated as per current status
2	The PP needs to revalidate the baseline data for one month considering the expansion scenario and submit the comparison of both old and new data.	The baseline data has been Revalidated for December 2023 and is submitted by PP.

3	The PP needs to submit the authenticated proof for achieved production of more than 5,00,000 Metric Tonnes in the FY 2023-24.	The Authenticated production details upto September 2023 has been submitted by PP
4	The PP needs to verify from the Decision Support System (DSS) available from the National Tiger Conservation Authority (NTCA) website clarifying that whether instant mine lease area is a part of the tiger corridor and whether the transportation route passing through the tiger dispersal route.	The location of mines with respect to Tiger Reserves and Tiger corridors as per DSS of NTCA has been submitted. The Mine lease is not part of any tiger corridor/ reserves.
5	The PP needs to submit the revised list of authenticated flora and fauna in reference to the Wild Life (Protection) Amendment Act, 2022 and shall submit the proof of the submission of aPplication of Wildlife Conservation Plan made to the Chief Wildlife Warden along with the activities proposed under Wildlife Conservation Plan.	The Revised and the updated Authenticated list of Flora and Fauna is submitted. The wildlife conservation plan was submitted to Chief Wildlife Warden, Govt. of A.P, Forest Department and acknowledgement was obtained on 29.12.2023.

6	The PP needs to submit the layout of crusher and the preventive measures taken for noise control and dust suppression.	The Layout plan consisting of Railway line, stock yard, loading point, crusher is Submitted. The Preventive measure taken for Noise control and Dust suppression is submitted.																																																									
7	The PP to submit the action plan to address the concerns raised during public hearing over a period of 3 years and status of implementation if any.	<p>The Concerns raised in the Public Hearing, Replies by management and the status of implementation is submitted. RCL has spent amount of Rs. 188.14 Lakhs towards implementation of Public Hearing Commitments for the period 2020 to 2023. PP has earmarked an additional amount of Rs.80 lakhs for completing the commitment of Public Hearing in the next two years as mentioned below:</p> <table border="1" data-bbox="576 801 1426 2000"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Activity</th> <th rowspan="2">Physical No.</th> <th colspan="3">Year</th> </tr> <tr> <th>2023-2024</th> <th>2024-2025</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1</td> <td rowspan="3">Development of Jaggayapet & nearby Hospitals</td> <td>Physical No.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Village</td> <td></td> <td></td> <td>Rs. 48.1 lakhs</td> </tr> <tr> <td>Budget Rs Lakh</td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">2</td> <td rowspan="3">Conducting free medical camps in surrounding villages & free medicines</td> <td>Physical No.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Villages</td> <td>Surrounding</td> <td>Surrounding</td> <td></td> </tr> <tr> <td>Budget Rs Lakh</td> <td>Rs.12.0 lakh</td> <td>Rs.12.0 lakh</td> <td>Rs. 39.17 lakh</td> </tr> <tr> <td rowspan="3">3</td> <td rowspan="3">Conducting eye testing camps & veterinary camps</td> <td>Physical No.</td> <td></td> <td>2veterinary camps</td> <td></td> </tr> <tr> <td>Villages</td> <td>Surrounding</td> <td>Surrounding</td> <td></td> </tr> <tr> <td>Budget Rs Lakh</td> <td>Rs. 1.0 lakh</td> <td>Rs. 1.0 lakh</td> <td>Rs. 2.4 lakh</td> </tr> <tr> <td>4</td> <td>Supply of</td> <td>Physical</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	S. No	Activity	Physical No.	Year			2023-2024	2024-2025	Total	1	Development of Jaggayapet & nearby Hospitals	Physical No.				Village			Rs. 48.1 lakhs	Budget Rs Lakh				2	Conducting free medical camps in surrounding villages & free medicines	Physical No.				Villages	Surrounding	Surrounding		Budget Rs Lakh	Rs.12.0 lakh	Rs.12.0 lakh	Rs. 39.17 lakh	3	Conducting eye testing camps & veterinary camps	Physical No.		2veterinary camps		Villages	Surrounding	Surrounding		Budget Rs Lakh	Rs. 1.0 lakh	Rs. 1.0 lakh	Rs. 2.4 lakh	4	Supply of	Physical			
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		drinking water through RO plants to surrounding villages	Physical No.			
			Village			
			Budget Rs Lakh			Rs. 18.18 lakh
5	Domestic water supply schemes and pipe networks	Physical No.				
		Village				
		Budget Rs Lakh				Rs. 24.45 lakh
6	Providing saplings to villages & tree guards	Physical No.				
		Village				
		Budget Rs Lakh				Rs. 2.75 lakh
7	Skill development programmes under Apprenticeship, Project work, Trainings shall be given to local educated youth	Physical No.	Nearly 40 students	Nearly 40 students		
		Villages	Surrounding	Surrounding		
		Budget Rs Lakh	Rs. 25 lakh	Rs. 25 lakh		Rs. 125.3 lakh
8	Admission to local students in company school	Physical No.	680	680		
		Villages	Surrounding	Surrounding		
		Budget Rs Lakh	Rs. 2 lakh	Rs. 2 lakh		Rs. 7.84 lakh
9	Construction of Pollavagu bridge	Physical No.	RCL will coordinate with Government agencies to facilitate discussion.			
		Villages				
		Budget				

				tRsLakh					
		10	Construction of bridge from Reddy naik	Physical No. Villages	Bridge is constructed with Government funds and made available in the year 2019.				
			Thandato Jagayapet	Budget tRsLakh					
						56.53	78.04	53.57	440
			Total Amount Spent So far			188.14			-
			Amount Proposed in next two years						80
8	The PP needs to submit the breakup of the project cost of Rs 4.0 Cr.	PP has submitted the breakup of the project cost of Rs 4.0 Cr (Rs. 400 lakh) and is mentioned below: Ramco Budawada Limestone Mine (RF): Capital cost from 1.10 to 2.50 MTPA							
		Type of Machinery	Capacity of each unit	Existing Machinery 1.10 MTPA	Additional requirement from 1.1 to 2.5 MTPA	Total requirement of Machinery for 2.5 MTPA	Cost /unit in lakh Rs.	Total cost in Lakh Rs. (from 1.1 to 2.5 MTPA)	
		Backhoe Excavators-Sk 380	2.3 Cu.m	1	1	2	90	90	
		Backhoe-Kobalco-220	1.1Cu.m	1	0	1	0	0	
		TiPPers	30 MT	6	3	9	60	180	
		Wagon Drill & Air Compressor	115 mm dia	1	0	1	0	0	

		Cabin Drill with 550 cfm compressor	115 mm dia	0	1	1	90	90
		Bull Dozer	--	1	0	1	0	0
		Rock breaker	20tonnes	0	0	0	0	0
		Water tanker	10 KL	1	0	1	0	0
		Jeep	---	1	0	1	0	0
		BMD Truck	6 Tonne	0	1	1	40	40
		Total		12	6	18		400
9	The PP needs to submit the latest complete approved mining plan in Parivesh portal.	PP has submitted the copy of approved Mine plan vide dated 21.04.2023 in respect of Budawada Limestone Mine (Reserved Forest) of M/s the Ramco Cements Ltd. over an extent of 160.00 ha. in of Budawada R.F, Jaggayyapeta Mandal, Krishna District, Andhra Pradesh State.						
10	The PP needs to submit the closure report issued by the Sub-Office for the partially complied conditions.	PP has submitted the letter dated 12.01.2024 of sub-regional office of the Ministry at Vijaywada wherein PP has been asked to expedite the submission of Wildlife Conservation Plan to Govt. of AP and Ministry. To include SPM in the fugitive emission monitoring parameters. Thus closure report is yet to be obtained.						
11	The PP needs to submit the copy of NoC obtained for abstraction of Groundwater.	PP has submitted the NoC for abstraction of Groundwater vide letter dated 13.11.2021 and valid for three years from the date of issuance.						

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

Activities	Capital cost (Crores)	Recurring cost(Lakhs/annum)
Air, Water and Noise pollution Control	0.2275	2.60
Occupational Health	0.005	0.30
Env. Monitoring and Management	0	1.50

Reclamation Borrow/Mined area and Greenbelt	0	0.50
Total	0.2325	4.90

xx. Details of project cost and employment:

Particulars	(Rs. in Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of public hearing)	2.9139
Project Cost	4.0
Employment (No.s)	55 (total, inclusive of 17 Nos. with this expansion project)

3. Observation and Recommendation of the EAC:

EAC during the deliberations asked the PP/EIA Consultant to present the KML file for showing the features of the Mine lease area including the features of their vicinity. The PP presented the KML file and showed the boundary and adjacent area of the mine lease. Thereafter, PP presented the reply of the additional details sought by the EAC in its meeting held during 5-7th December, 2023. The PP has presented the revalidated baseline data for the month of December, 2023 and found the important air quality elements such PM10, PM2.5, SO2, NO2 and CO are within the permissible limit as per the NAAQ standards for Industrial, Residential, Rural and Other areas. The comparison of old and new data too were showcased by the PP with regard to the prevalent air quality.

PP submitted the authenticated past production capacity from the year 2009-10 to September 2023-24 and the production capacity in the year 2023-24 is 7,55,632 MT (till September 2023). As per the decision support system for National Tiger Conservation Authority (NTCA) the Mine lease area is not the part of any tiger corridors/reserves. The nearest Tiger reserves / Corridor is at distance of 68.69 Km - WSW direction i.e. Amrabad Tiger Sanctuary.

The PP has obtained the revised and updated authenticated list of Flora and Fauna on 21.12.2023 as per Wild Life (Protection) Act 1972 and its subsequent amendment in 2022. The Wildlife conservation plan was submitted to Chief Wildlife Warden, Govt. of A.P, Forest Department vide acknowledgement dated 29.12.2023. PP has also submitted the layout of crusher and the preventive measures for noise control and dust suppression.

PP has addressed the concerns raised during public hearing over a period of 3 years and submitted their implementation status after spending Rs. 188.14 lakh for the period of 2020 to 2023 and an additional amount of Rs. 80 lakhs has been earmarked for the next two years. The backup of project cost of Rs. 4.0 Cr has been submitted by the PP.

Further PP stated that the mining operations are being carried out as per MOEFCC, IBM and DGMS norms implementing all pollution control measures to mitigate dust emissions during mining like drilling operations by wet drilling technique. Mobile water sprinklers are used on haul roads to control fugitive dust emissions.

Committee also discussed the court case and its current status along with the issue of mineral transportation in a small stretch of land owned by M/s Rashtriyalspat Nigam Limited (RINL). PP informed that approach road issue is pending at court. A writ petition was filed by RINL Writ. No. 5066 of 2019, dt.10.04.2019 against Govt. of Andhra Pradesh and TRCL. The High Court of Andhra Pradesh issued the order on 25.04.2019 for suspension of Memo No. 11031/M.III(2)/2013, Dt. 23.05.2018 and further memo No. 11031/M.III(2)/2013, Dt. 23.01.2019. Hon'ble AP High Court was pleased to dismiss the writ petition filed by RINL on 14.06.2021 after hearing all the parties and also was pleased to vacate the interim stay granted in the matter. RINL went for appeal against the same judgment in Writ No. 424 of 2021, dt.15.07.2021. The appeal was heard on 22.07.2021 and Honbl'e Chief Justice Bench issued the orders to stop operations on road and maintain the "Status Quo" in this matter till the next date of hearing. Presently an alternative transport route which is of a greater distance is being utilized.

Based on the above, EAC **recommended** the proposal for grant of Environmental Clearance for RamcoBudhwada Limestone Mine for enhancement in production capacity from 1.1 to 2.5 MTPA along with 1200 TPH crusher in the mine lease area of 160.0 ha by M/s The Ramco Cements Limited located at Village Budawada, Taluk Jaggayyapeta, District NTR (Earlier Krishna), Andhra Pradesh under provisions of EIA Notification, 2006 and its amendments therein with following additional specific conditions in addition to the standard EC conditions applicable for Non-coal mining projects:

Specific Conditions:

- i. PP shall obtain CTE/CTO from State Pollution Control Board for 2.5 MTPA production capacities for Limestone mine.
- ii. The Project Proponent needs to ensure that the machinery requirement/capacity shall match with the proposed expansion production capacity so as to avoid the sudden increase in pollution load.
- iii. PP shall ensure the compliance of expenditure to be incurred for wildlife conservation plan submitted to the State Govt. and the details expenditure shall be submitted with six monthly EC compliance report to Ministry's Sub-Regional Office.
- iv. The Project Proponent needs to explore the possibility of using advanced/ latest mining technologies available so as to minimize the ecological impacts.
- v. PP shall dissipate the noise from the mining operations within the mining lease area. PP shall provide ear muffs to all mine workers to avoid health implications and PP shall limit the exposure time of workers to excessive noise.
- vi. The Project Proponent needs to carry out ground vibration study through reputed institute to determine maximum charge per hole and charge to be blasted per delay so that ground vibrations are minimized and kept within permissible safe limits fixed by DGMS.
- vii. PP shall transport the limestone from the Mine lease to cement plant by the dedicated railway wagon.
- viii. The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. 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.

- ix. 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 Regional Office
- x. The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office.
- xi. The Project Proponent needs to take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself. The dense plantation shall be carried out in the vicinity of the crusher. 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.
- xii. PP shall install 4 Nos. of RO plants for uninterrupted supply of drinking water to the nearby villages DP Thanda, Jayanthipuram, Ravirala&Nawabpet and submit a report with photographs to Sub-Regional Office, MoEF&CC
- xiii. PP shall submit the status of Oxygen plant constructed at Jaggayyapet Community Health Centre as well as the Ambulance facility that has been extended for the near villagers to the Sub-Regional Office, MoEF&CC.
- xiv. The Project Proponent needs to make provision for permanent water sprinklers instead of water tankers. About, 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. The Project Proponent needs to put effort to reduce water consumption by 30%.
- xv. PP shall submit the log-book detail of patient & doctors visited to established medical camps in nearby villages and amount of medicines supply to Sub-Regional Office, MoEF&CC.
- xvi. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC.

- xvii. PP shall implement the activities-wise proposed budget for Public Hearing Budget of Rs. 80 Lakh as proposed before the EAC in time bound manner. The details of annual expenditure incurred shall be part of report to be submitted to Sub-Regional Office, MoEF&CC. PP needs to include the audited figures against the expenditure and activities to be monitored by through dedicated monitoring mechanism. The maintenance of all activities shall be covered through recurring cost of Public Hearing, and continued as a part of CSR budget.
- xviii. PP shall create a “Public Grievance Redressal and Monitoring System” for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to Sub-Regional Office within 3 months. A logbook to be maintained by PP on “Public Grievance Redressal and Monitoring System.”
- 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 non-compliance or infringement should be reported to the concerned authority.
- xxi. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xxii. 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.
- xxiii. 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.
- xxiv. The Project Proponent shall periodically maintain the garland drains, retaining wall and other water management structures in the mine lease area.

2.2 Mevasa Bauxite (Aluminous Laterite) mine with production capacity of 1,49,248 TPA in the mine lease area of 8.7305 ha by M/s Patel Kaushik Kumar located at Village

Mevasa, Taluka Kalyanpur, District Devbhumi Dwarka, Gujarat – For Reconsideration of Terms of Reference (ToR) reg.

[F.No. J-11015/36/2022-IA.II(M), Proposal No. IA/GJ/MIN/289746/2022, EIA Consultant - M/s Patel Kaushik Kumar]

1. The proposal is for Terms of Reference (ToR) for Mevasa Bauxite (Aluminous Laterite) mine with production capacity of 1,49,248 TPA (RoM) in the mine lease area of 8.7305 ha by M/s Patel Kaushik Kumar located at Village Mevasa, Taluka Kalyanpur, District Devbhumi Dwarka, Gujarat.

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

- i. The mine lease area is located between Latitude: 22°15'6.86" N to 22°15'22.03" N & Longitude: 69°17'51.10"E to 69°18'7.59" E. The mine lease area falls under the Survey of India Toposheet No: F42 J08 and falls in Seismic Zone - IV.
- ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as proposal attracts the general conditions as the Protected areas notified under the wildlife (Protection) Act, 1972 i.e., Marine Sanctuary, Gulf of Kutch, Devbhumi Dwarka is located ~1.267 km from the mine lease area and appraised at the Central level.
- iii. The proposal was earlier considered in the 4th EAC (Non-Coal Mining) meeting held during 28-29 September, 2022 wherein the EAC noted that the PP vide email dated 17.09.2022 sought deferment stating that the PP was not in a position to present themselves due to unforeseen circumstances. Therefore, the EAC deferred the proposal as per the request of the PP.
- iv. The PP vide letter dated 30.01.2023 requested to the Ministry for enlisting the proposal in the upcoming EAC meeting and accordingly the proposal was reconsidered in the 11th EAC (Non-Coal Mining) held during 1-2 March, 2023 wherein the committee seeks the information related to the authenticated document/map from the Forest Department regarding the distance of the Eco-Sensitive Zone(ESZ) from the mine lease area due to close proximity of Eco-Sensitive Zone(ESZ). The EAC also opined that the Ministry may seek comments from the ESZ Division of the Ministry, therefore the Project was deferred for submitting the required additional information. Later on, the project was relisted and subsequently ADS reply submitted online on 25.01.2024 for appraisal in the 27th EAC meeting held during 20-21st February, 2024.
- v. Details of Mine Lease in chronological manner:

S. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha

1	Letter of Intent (LoI)- Order no. MMR/102021/BLK/ 534113/CHH1 Letter of Intent for grant of mining lease in pursuant to Rule 10 (2) of the Mineral (Auction) Rules, 2015 and this Letter of Intent is valid for a period of 3 years from the date of its issuance.	30.06.2021	Bauxite (Aluminous Laterite), Major	Valid for 3 years from the date of issuan ce.	Industries & Mine Departme nt, Gandhina gar, Gujarat	8.73 05
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vi. Land Use/Land Cover of the Mine Lease Area:

Private land	Yes
Total Mining lease area (MLA), ha	8.7305

vii. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	File No. 684(4)(1)/MP- 401(370)/2021-22/GNR/160 Dated 12.04.2022 by IBM, Office of Regional Controller of Mines, Gandhinagar, Gujarat
	Date	12.04.2022
	Mineral & (Major/Minor)	Bauxite (Aluminous Laterite) (Major)
	Mine Lease Area, Ha	8.7305
	Validity	For a period of 5 years from the date of execution of mine lease deed
Mining Parameters	Quantitative Description	
Method of Mining	Open cast semi mechanized mining	
Drilling/Blasting	N/a	
Geological Reserves	9,94,498 Tonnes	
Mineable Reserves	6,95,530 Tonnes	

Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	S.No.	Year	Total Handling (T)	Mineral Waste Quantity (T) Grade: 20 % Al ₂ O ₃	ROM Quantity (T)	ROM Quantity Saleable Mineral (t)
	1	I st	114780	67325	47455	47455
	2	II nd	184472	127219	57253	57253
	3	III rd	124157	65775	58382	58382
	4	IV th	297577	213331	84246	84246
	5	V th	268762	119514	149248	149248
	Total		989748	593164	396584	396584
Top Soil (CUM): 5066						
Life of mine	5 years					
Mine Bench Height & Bench Width	5 m & 5 m					
No. of Mine Benches	3					
Existing Depth, m bgl	--					
Ultimate Depth of Mining, m bgl	22.44					
Ground Water Table, m bgl	28					
Details of ground water intersection	None					
Individual bench slope	75 ⁰					
Overall pit slope	45 ⁰					
Details of existing/ proposed Crusher	--					
Mineral Beneficiation	--					
RoM output size	268762 (ROM-Maximum during 5 th year)					
Transportation details including capacity of dumper/tipper, mode of transport and distance	Project Proponent submitted that the extracted Bauxite is transported to the end users by Trucks (Capacity of 20 Tonnes) through NH 947 via Mewasa village. Total distance of Katcha road is 1.658 Km. (Mine site to NH).					
Generation of Topsoil/OB & its Management during plan period & conceptual period	PP reported that there will be generation of topsoil 5,066 cu.m and the topsoil will be used for development of plantation.					
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	PP reported that during the plan period, waste is likely to be generated in the form of associated clay with the bauxite horizon as mineral wastes, which is below the threshold grade and has no sale value in present market but it may					

	have market in future and therefore, the reject will be stacked separately at statutory barrier.
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viii. Water requirement:

Total water requirement	9KLD	Drinking & Domestic	1.0 KLD
		Plantation	3.5 KLD
		Dust suPPression	4.5 KLD
Source	PP submitted that the required water will be purchased through private tankers.		

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

Particulars	Particular's Name	Distance & Directions
Village	Virpur	1.324 km, NE
Town	Khambaliya	35 km, SE
Highway	NH-947	9.512 km , South
Railway Station/Railway line	Bhatiya	17.440 km, South
Water Bodies	Rani Nadi	1.132, SW
Forest	--	--

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	--
National Park	No	Marine National Park – 6.233 km
Wildlife Sanctuary	Yes	<p>Marine Sanctuary, Gulf of Kutch - 1.267 km, W Marine National Park, Gulf of Kutch – 6.233 km, NW</p> <p>Final ESZ Notification on Marine National and Marine Sanctuary declared by the Ministry vide Notification S.O 2561(E) dated 22.08.2013</p> <p>1) The Eco-Sensitive Zone (hereinafter referred to as the ESZ) towards landward side constitutes an area of about 208.58 square kilometre including 36 villages adjoining Marine National Park and Sanctuary and the boundary of the ESZ from coastal boundary towards landward, side</p>

		<p>extends up to a length of one kilometre which include either whole or part of survey numbers upto this limit of one kilometre.</p> <p>2) The ESZ towards seaward side constitutes an area of 105.14 square kilometre and an area within 200 metre from boundary of Marine National Park and Sanctuary towards seaward side has been included in the said Zone.</p> <p>31 rivers which flow into the Gulf of Kachchh have been included in the ESZ and the length of the rivers falling in the said Zone varies from 0 to 5 square kilometre and a width of 250 metre from the centre of the river on both sides of river has also been included in the said zone which constitute a total area of 12.53 square kilometre.</p>
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes	Eco Sensitive Zone of Marine National Park & Sanctury is 17 m as per NOC certificate received from Forest & Environment Department, Government of Gujarat.
Coastal Regulation Zone (CRZ)	No	High Tide Line: 0.795 km Low Tide Line: 2.557 km CRZ boundary (GCZMA approved Map): 1.001 km, SW
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	Number and name of schedule-1 species will be ascertained through authenticated list from forest department and will be submitted at the stage of EC Application.

xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	2.88 Ha; 500 saplings
Budget for green plant& plantation till the end of life of mine.	1,10,000

xii. Rehabilitation & Resettlement (R&R):

R & R details	PP has submitted that R&R does not involved in this proposal.
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xiii. Court case details: No court case w.r.t project

Court Case, No and its present status	PP submitted an undertaking vide letter dated 20.02.2023 stating that there is no pending Court Cases related to this respective project.
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xiv. Additional detail sought details :

The proposal was earlier considered in the 11thEAC meeting held during 1-2nd March, 2023 wherein the Committee has deferred the proposal and asked the requisite information. The Project Propoent has submitted the reply on the Parivesh portal as given under:

S.No	Observation of EAC	Reply of PP
1.	The Ministry may seek comments from the ESZ Division of the Ministry regarding the distance of the Eco-Sensitive Zone(ESZ) from the mine lease area and also to clarify whether the instant mine falling within ESZ or not.	The comments provided by ESZ Division of the Ministry is given as under:- “Ascertaining the distance of the mining lease from the boundary of the ESZ, Kml file of the proposed project site provided by the IA Division carried out in-house indicates that the site falls outside the ESZ of the Marine Sanctuary. However, mining, other than mining of atomic minerals by agency of the Department of Atomic Energy, in CRZ areas is a prohibited activity and the PD may like to ascertain the compliance with the CRZ regulations, as may be admissible.”
2.	The PP also needs to submit the letter from State forest department regarding the distance of ESZ from mine lease area with authenticated map.	PP has obtained the No objection certificate (NOC) from Forest & Environment Department, Government of Gujarat, Gandhinagar dated 12.01.2024. According to this certificate the approximate distance from nearest declared Eco Sensitive Zone of Marine National Park & Sanctuary is 17 m.
3.	The PP needs to	Backfilling and rehabilitation of mined area is proposed. As on date about 5066 m3 top soil generated has already been utilized. During

<p>plan for backfilling and rehabilitation of mined out areas.</p>	<p>first to third year there will no top soil generation. The waste dumps during first to third year will temporarily stored at South West part of the lease area. During fourth and fifth year dumps will stored in west part of the lease area (with proposed production year I to III). Backfilling is proposed from fourth to fifth year. The total mined out area fully rehabilitated from reclaimed area (in hectares): 3.8998 Ha The area under water reservoir considered rehabilitated (in Hectares): 1.9285 Ha.</p> <p>During First three year of working, no top soil generated as mineral is exposed on surface in the form of Interburden.</p> <p>During First Year: Depth of working: 7.3 m, Level 10 to 0 m : 3 strips of Bauxite mineral (G2-122) extracted, Production = 47455 Tonnes, Level touched = 2.7 m</p> <p>During Second Year: Depth of working: 13.83 m, Level 2.7 to -11.13 m : 1 strips of Bauxite mineral (G2-122) extracted, Production = 57253 Tonnes, Level touched = -11.13 m</p> <p>During Third Year: Depth of working: 4.0 m, Level -11.13 to -15.13 m : 1 strips of Bauxite mineral (G2-122) extracted, Production = 58382 Tonnes, Level touched = -15.13 m</p> <p>At the end of 3rd year the maximum working depth of 15.13 m is reached. After 3rd Year, the working shifts eastwards. Interburden accumulated is filled back in the pit and rehabilitation of mine out area will starts.</p> <p>During Fourth Year: Depth of working: 22.44 m, Level 10 to -12.44 m : 2 strips of Bauxite mineral (G2-122) extracted, Production = 84246 Tonnes, Level touched = -12.44 m.</p> <p>During Fifth Year: Depth of working: 8.96 m, Level -12.44 to -21.4 m : 2 strips of Bauxite mineral (G2-122) extracted, Production = 149248 Tonnes, Level touched = -21.4 m</p> <table border="1" data-bbox="470 1646 1428 2027"> <thead> <tr> <th colspan="4">Year wise proposal</th> </tr> <tr> <th>Year</th> <th>Top Soil generated (m³)</th> <th>Top soil utilized (m³)</th> <th>Top soil stored (m³)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>2</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>3</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>4</td> <td>1294</td> <td>1294</td> <td>0</td> </tr> </tbody> </table>	Year wise proposal				Year	Top Soil generated (m ³)	Top soil utilized (m ³)	Top soil stored (m ³)	1	0	0	0	2	0	0	0	3	0	0	0	4	1294	1294	0
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3	0	0	0																						
4	1294	1294	0																						

5	3772	3772	0				
<p>No top soil generation during 1st to 3rd year. The top soil spreading is shown in the plate in the next slide during 3rd and 4th year</p>							
Dumps							
S.No	Year	Dump ID	Type of Dump	Proposed Area (Ha)	Height (m)	Total dump quantity (m ³)	New dump location
1	I	Dump 1	Waste	4488	15	67320	South West
2	II	Dump 2	Waste	8481	15	127215	South West
3	III	Dump 3	Waste	4385	15	65775	South West
4	IV	Dump 4	Waste	10851	19.66	213331	West (within proposed production year I to III)
5	V	Dump 5	Waste	11892	10.05	119515	West (within proposed production year I to III)
Backfilling -Year wise proposal							
S.No.	Year	Pit D	Area (m ²)	Top RL	Bottom RL		
1.	IV	Pit-1	10851	4.22	-9.34		
2.	V	Pit-1	11892	10.16	5.13		

xv. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	3.0

Employment (No.s)	13
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3 Observation and Recommendation of the EAC

The Project Proponent presented the KML file to indicate the site features in the study area of 10km radius. The EAC on viewing the KML file noted that the Marine Sanctuary, Gulf of Kutch is located at a distance of 1.267 km, W and the Marine National Park, Gulf of Kutch is located at a distance of 6.233 km, NW from the mine lease area. The EAC noted that as per the NoC obtained from the Forest & Environment Department of Government of Gujarat, Gandhinagar the Eco-Sensitive Zone(ESZ) of Marine National Park & Sanctuary is located at a distance of 17m from the mine lease area. The Final ESZ Notification on Marine National and Marine Sanctuary was declared by the Ministry vide Notification S.O 2561(E) dated 22.08.2013.

Further, the Committee noted the detailed plan of backfilling and rehabilitation of mined out areas. The PP informed to the Committee that during first three year of working, no top soil will be generated, as the mineral is exposed on surface in the form of interburden. At the end of 3rd year the maximum working depth of mining will be reached up to 15.13m and the work will shift eastwards. The Interburden accumulated is filled back in the pit and rehabilitation of mine out area. During fourth and fifth year dumps will be stored in west part of the lease area and backfilling will start from fourth to fifth year.

The PP has proposed that the mining will be carried out by semi mechanized open cast mining method by forming benches without any drilling & Blasting. The transportation of mineral has been proposed in the trucks using an approach road.

Based on the discussions held, the EAC in its meeting held during 20thFebruary & 21stFebruary, 2024, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to Mevasa Bauxite (Aluminous Laterite) mine with production capacity of 1,49,248 TPA in the mine lease area of 8.7305 ha by M/s Patel Kaushikkumar located at Village Mevasa, Taluka Kalyanpur, District Devbhumi Dwarka, Gujarat for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

Specific Conditions:

- i. Since the mine site is located within 20 km from seaboard frontier the Project Proponent shall submit No Objection Certificate from Ministry of Defence, before grant of TOR.
- ii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.
- iii. 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.

- iv. 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.
- v. 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.
- vi. 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.
- vii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling considering the site features and their impacts and mitigation.
- viii. The Project Proponent shall conduct scientific study by reputed institute by considering the geological condition, sequence of mining, plan for backfilling, pit stability, slope stability, handling and management of overburden, from the view point of environment and safety.
- ix. PP shall submit the plan for drinking water supply through dedicated pipeline inside the ML area as well for the near villagers.
- x. 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.
- xi. 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.
- xii. 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 from a NABL/MoEF&CC accredited laboratory.
- 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. PP shall explore the use e-vehciles/LNG/CNG based mining machineries and trucks for mining operation and transportation of Non-coal.
- xv. PP to submit a dedicated transportation route through road, avoiding the sensitive areas, after conducting carrying capacity study of the existing road and the level of traffic as per IRC guidelines.
- xvi. PP shall submit letter from Principal Chief Conservator of Forest, State Government that the area does not falls under any corridor of Elephants & Tigers.

- xvii. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of tar road/cart tracks, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.
- 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 detailed scientific study on flora and fauna and also to highlight on the endangered species. The Project Proponent needs to verify the list as per the latest Wildlife Protection Amendment Act, 2022.
- xxii. PP shall submit the action plan to adhere the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
- xxiii. PP to submit the status of any pending court cases or disposed of cases related to Civil court, High court, Supreme court and in any tribunal along with its implications.
- xxiv. PP shall prepare a wildlife conservation plan in consultation with the local forest department mainly focusing upon the marine eco-system.
- xxv. The Project Proponent needs to submit a letter from the Department of Geology and Mining, Government of Rajasthan clarifying whether any illegal mining within the mine lease area has been carried out or not and whether the same has been carried out by M/s. Patel Kaushikumar?
- xxvi. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) 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.
- xxvii. The Project Proponent needs to submit the proof of the demarcation of the boundary pillars fixed on the ground.

2.3 Expansion of Bailadila Iron Ore Mine for enhancement in production capacity from 10.00 to 12 MTPA (RoM) of Iron Ore with total excavation 18 MTPA (Waste excavation of 6.00 MTPA) in the Mine Lease area of 540.05 ha by M/s NMDC Limited located at Tehsil Bachel, District South Bastar Dantewada, Chhattisgarh – For

Environmental Clearance reg. (20% capacity expansion as per O.M dated 11.04.2022)[F.No. IA-J-11015/261/2007-IA-II(M), Proposal No. IA/CG/MIN/459662/2024, EIA Consultant - M/s. Ecomen Laboratories (P) Ltd]

1 The instant proposal is for expansion of Bailadila Iron Ore Mine for enhancement in production capacity from 10.00 to 12 MTPA (RoM) of Iron Ore with total excavation 18 MTPA(Waste excavation of 6.00 MTPA) in the Mine Lease area of 540.05 ha by M/s NMDC Limited located at Tehsil Bachel, District South Bastar Dantewada, Chhattisgarh.

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: 18°40'00.54" to 18°41'50.38" Nand Longitude: 81°10'41.83" to 81°12'31.89" E. The mine lease area falls under the Survey of India Toposheet No: E44J2 and falls in Seismic Zone-II.
- iii. The PP has obtained Environmental Clearance on 23.07.2007 for Bailadila Iron Ore mine in the ML area of 540.05 ha for deposit 5 at Bailadila range hills at village Bachel, in district South Bastar Dantewada, Chhattisgarh.
- iv. Mine Lease Detail:

S. No.	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Grant of Mine lease Letter number:F4-2/2015-XII	17/12/2019	Iron Ore	20 years	Mineral Resource Department, Government of Madhya Pradesh, Bhopal	540.05

S. No	Details of grant of Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	10/01/2020	11/09/2015	10/09/2035	Iron Ore (Heamatite)	540.05

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

Forest land	540.05
Total Mining lease area (MLA)	540.05 Ha
Project has acquired forest land and revenue land outside Mining Lease area for setting up of ancillary activities related to Mining such as Screening plant, loading plant etc.	

vi. Mining plan details:

Mining Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	RPR/DANTEWADA/IRON/1360/MRMP/2022-23
	Date	17/07/2023
	Mineral & (Major/Minor)	Iron Ore (Haematite)
	Mine Lease Area, Ha	540.05
	Validity	2024-25
Mining Parameters	Quantitative Description	
Method of Mining	Mechanized Open Cast method	
Drilling/Blasting	Drilling is being done by 250mm dia and 150mm dia blast hole drills. Control blasting is being done using site mix emulsion explosives.	
Geological Reserves	525.65 Million tons	
Mineable Reserves	315.80 Million tons	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	12.00 MTPA – ROM Iron Ore 06.00 MTPA – Waste excavation 18.00 MTPA – Total excavation	
Life of mine	27 years	
Mine Bench Height & Bench Width	12 m & 30 – 50 m	
No. of Mine Benches	9	
Existing Depth, m bgl	996m ams level	
Ultimate Depth of Mining, m bgl	864m ams level	
Ground Water Table, m below ground level	0.81 m to 21.02 m bgl (during summer season 2022)	
Details of ground water intersection	Not APPLICable	
Individual bench slope	82 ⁰ to 85 ⁰	
Overall pit slope	42 ⁰ to 45 ⁰	
Details of existing/ proposed Crusher	2 no.s of Gyrotory Crushers inside lease area.	
Mineral Beneficiation	Screening plant including mineral beneficiation is located outside Mining Lease area. No capacity expansion is proposed in Screening plant.	
RoM output size	150 mm Hematite Iron Ore	
Transportation details including capacity of	Shovel dumper Combination is being used for loading and transportation of excavated RoM Iron Ore from the Mine pit to crushing plant (85 / 100 Tons capacity dumpers).	

dumper/tipper, mode of transport and distance	Present lead distance: 2.95 km Ultimate lead distance: 3.94 km The crushed ore is transported through downhill conveyor system to Screening plant located outside ML area at Bacheli. The sized ore from the plant is transported through conveyors to Loading plant at Bacheli. The total conveyor length is 10.38 Km.
Generation of Topsoil/OB & its Management during plan period & conceptual period	The waste rock (less than 45% Fe) generation till life of mine shall be 207.09 million tons. About 70.00 million tons will be generated till lease period 2035 which will be accommodated in the 110.97 Ha area identified for waste dumping as per approved Mining Plan. The remaining waste will be dumped at other identified places as per Mining Plan approval once in 5 years. Toe walls, garland drains will be constructed at toe of dumps. Proper terracing will be done for stabilization of dumps and plantation will be with native tree species. Grass seeds will be broadcasted on sloes of the dumps. Geo-coir matting will also be done.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Sub grade ore (45% to 55% Fe) generation during plan period will be approx. 0.80 MT & during conceptual period approx. 25.063 MT and the same will be stacked separately in the lease area. Suitable blending is carried out by mixing the sub grade with high quality ore.

vii. Water requirement

Total water requirement (17325 KLD for Bailadila Deposi-5 project)	Dust suppression at Mining area etc.	Fresh water	250 KLD
		Treated water	----
Source	Nalla no: 19, 19A, Galli Nalla, Bacheli nalla		
Permission	Obtained from Water Resource Department, Government of Chhattisgarh, Raipur vide letter no: 3642/29/13/2000/31/D-4 dated 24/08/2023.		
Additional information (if any)	Water tax @ Rs.5.00 per KL is being paid to Water Resource Department, Dantewada.		

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

Particulars	Particular's Name	Distance & Directions
Village	Bade Bacheli, Municipal Council	4.50 Km, ENE
Town	Dantewada	30 Km, NNE
Highway	State Highway no: 5	4.40 Km, NNE
Interstate Boundary	Not APPLICABLE	-----
Railway Station	Bacheli	3.5 Km, E

Water Bodies	Galli Nala Berudi Nadi Mari Nadi Jhiram Nadi Koyar Nadi Sankani nalla/river	0.2 Km, E 3.00 Km, W 7.5 Km, NW 7.00 Km, SWS 9.00 Km, SE 6.2 Km, NE
Forest	Bailadila Reserve Forest Bijapur Reserve Forest	Within lease area 1.0 Km, W

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land /Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/ letter/ Remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	The Forest Clearance was obtained from MoEFCC over 540.05 ha of lease area vide F.No: 8-38/97–FC dated 18-06-1999. The validity extension of the existing forest clearance was obtained from the Govt. of Chhattisgarh, Forest Department, Nava Raipur vide letter No. F-5-49/2015/10-2 dated 31/03/2020 and is co-terminus with the extended lease period i.e. up to 11/09/2035.
National Park	No	-----
Wildlife Sanctuary	No	----
Elephant/Tiger Reserve	No	----
Eco-sensitive Zone (ESZ) / Eco-sensitive Area (ESA)	No	----
Coastal Regulation Zone (CRZ)	No	----
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	7 no.s. Sloth Bear, Indian Pangolin, Leopard, Python, Bengal Monitor Lizard, Bastar Hill Myna and Common Peafowl. Obtained authentication of flora and fauna by DFO, Dantewada vide letter no:2929 dated 9/5/2023.
Wildlife Conservation Plan	Yes	Principal Chief Conservator of Forests (Wildlife)/ Chief Wildlife Warden, Raipur has accorded approval for Conservation Plan of Bailadila Iron Ore Mine, Bacheli Complex for an amount of Rs. 14,47,32,700/- vide letter no. WL/Mgmt./FN-315/2017/571 dated 04/02/2017. Bailadila Iron Ore Mine, Bacheli Complex has deposited Rs. 14,47,32,700/- in CAMPA account through RTGS transfer on 27/03/2017.

Additional Information (if any)	The conservation plan is being implemented by State Forest Department by drawing the funds from CAMPA A/C as per Annual Plan of Operations (APO) every year.
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x. Green belt/plantation details:

Proposed area for green belt/plantation	The Mining Lease area of Bailadila Deposit-5 is Reserve Forest land with density of trees. At present, 237.05 ha area is un-disturbed and maintained under plantation wherein gap plantation works have been undertaken.
Budget for green plant & plantation till the end of life of mine.	Rs.53.24 Crores.
Budget for nursery	Rs.100 Lakhs
Details of existing plantation and its survival rate	Total of 1,61,430 saplings have been planted in side lease. Survival rate is 80%. Plantation has also been done outside lease area.
No. of tree cuts in the mine lease area and compensatory afforestation	C.A charges of Rs.214.50 lakhs have been paid to Forest Department.
Particulars for Green belt/plantation	237.05 Ha (existing)
7.5 m barrier & non-mineralized zone	7.61 Ha

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March to May 2022
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer
Predominant Wind direction (From)	South West
Ambient Air Quality (no. of locations) and results	11 Locations. Results Summary given below: PM ₁₀ : 40.17 µg/m ³ to 66.72 µg/m ³ PM _{2.5} : 16.92 µg/m ³ to 34.56 µg/m ³ SO ₂ : 06.80 µg/m ³ to 14.78 µg/m ³ NO ₂ : 14.59 µg/m ³ to 27.62 µg/m ³

Noise level (no. of locations) and results	<p>11 Locations</p> <p>Result Summary given below</p> <p>Day Time (L_{day}) noise level: 37.14 dB (A) – 67.90 dB (A)</p> <p>Night Time (L_{night}) noise level: 27.76 dB (A) – 57.40 dB (A)</p>																																		
Water Quality (no. of locations) and results	<p>Surface water locations: 5</p> <p>Results summary given below:</p> <table border="1" data-bbox="448 510 1422 954"> <thead> <tr> <th>Parameters</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pH at 25°C</td> <td>6.90 – 7.19</td> </tr> <tr> <td>Total Dissolved solids, mg/l</td> <td>190 – 292</td> </tr> <tr> <td>Dissolved Oxygen, mg/l</td> <td>5.40 – 7.10</td> </tr> <tr> <td>BOD, 3 days at 27°C</td> <td>0.99 – 1.00</td> </tr> <tr> <td>Chloride as cl-, mg/l</td> <td>10 – 22</td> </tr> <tr> <td>Fluoride as F, mg/l</td> <td>0.12 – 0.66</td> </tr> <tr> <td>Sulphates as SO₄, mg/l</td> <td>9.21 – 18.50</td> </tr> <tr> <td>Total coliform MPN/100 ml</td> <td>240 - 380</td> </tr> </tbody> </table> <p>Ground water locations: 5.</p> <p>Results summary given below:</p> <table border="1" data-bbox="448 1039 1422 1440"> <thead> <tr> <th>Parameters</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>pH at 25°C</td> <td>6.85 - 7.10</td> </tr> <tr> <td>Total Dissolved solids, mg/l</td> <td>152-188</td> </tr> <tr> <td>Chloride as cl-, mg/l</td> <td>8.0 – 14.0</td> </tr> <tr> <td>Total Hardness, mg/l</td> <td>52.0 – 72.0</td> </tr> <tr> <td>Fluoride as F, mg/l</td> <td>0.16 – 0.21</td> </tr> <tr> <td>Sulphates as SO₄, mg/l</td> <td>9.80 – 11.30</td> </tr> <tr> <td>Total coliform MPN/100 ml</td> <td>Absent</td> </tr> </tbody> </table>	Parameters	Value	pH at 25°C	6.90 – 7.19	Total Dissolved solids, mg/l	190 – 292	Dissolved Oxygen, mg/l	5.40 – 7.10	BOD, 3 days at 27°C	0.99 – 1.00	Chloride as cl-, mg/l	10 – 22	Fluoride as F, mg/l	0.12 – 0.66	Sulphates as SO ₄ , mg/l	9.21 – 18.50	Total coliform MPN/100 ml	240 - 380	Parameters	Value	pH at 25°C	6.85 - 7.10	Total Dissolved solids, mg/l	152-188	Chloride as cl-, mg/l	8.0 – 14.0	Total Hardness, mg/l	52.0 – 72.0	Fluoride as F, mg/l	0.16 – 0.21	Sulphates as SO ₄ , mg/l	9.80 – 11.30	Total coliform MPN/100 ml	Absent
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Soil Quality (no. of locations) and results	<p>6 locations</p> <p>Results summary given below:</p> <table border="1" data-bbox="448 1570 1329 1917"> <thead> <tr> <th>Parameters</th> <th>Observed Values</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>5.66 – 6.34</td> </tr> <tr> <td>Texture</td> <td>Silty clay & Sandy clay</td> </tr> <tr> <td>Electrical Conductivity (µS/cm)</td> <td>190 – 245</td> </tr> <tr> <td>Organic Carbon (%)</td> <td>0.33 --- 0.88</td> </tr> <tr> <td>Available Nitrogen as N (kg/Ha)</td> <td>87 --- 316</td> </tr> <tr> <td>Available Phosphorus as P (kg/Ha)</td> <td>11.40 – 35.30</td> </tr> <tr> <td>Available Potassium (kg/Ha)</td> <td>195 -- 244</td> </tr> </tbody> </table>	Parameters	Observed Values	pH	5.66 – 6.34	Texture	Silty clay & Sandy clay	Electrical Conductivity (µS/cm)	190 – 245	Organic Carbon (%)	0.33 --- 0.88	Available Nitrogen as N (kg/Ha)	87 --- 316	Available Phosphorus as P (kg/Ha)	11.40 – 35.30	Available Potassium (kg/Ha)	195 -- 244																		
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Hydro-geological study and results	Ground water quality and quantity is controlled by existing Hydro-geological conditions and no adverse effect of mining activity on Ground water environment is encountered. The ground water levels and quality is being carried out at 41 locations once in season for four seasons in a year.
Traffic study (no. of locations) and results	The traffic survey was conducted at one location on Kirandul – Geedam SH road. The Passenger Car Unit (PCU) recorded 3066 PCU. As per guidelines for capacity of roads in rural areas of IRC, recommended design series volumes for single lane roads in plain terrain are 15000 PCU/day.

xii. Public Hearing (PH) Details:

The Project Proponent has already conducted the Public Hearing on 01.07.2006 for obtaining the Environmental Clearance on 23.07.2007 for Bailadila Iron Ore mine in the ML area of 540.05 ha for deposit 5 at Bailadila range hills at village Bachel, in district South Bastar Dantewada, Chhattisgarh.

As per the office memorandum vide F.No. IA3-22/10/2022-IA.III dated 11.04.2022, PP may obtain EC under para 7(ii) (a) of EIA notification 2006, for expansion of 20% capacity, within the existing premises/ mine lease area, without additional land acquisition & subject to fulfilment of criterias given as under:

“The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.

xiii. 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 to Operate	valid up to 31/03/2025		
Certified Compliance Report and Inspection date	Inspection date: 16/09/2023. The CCR was issued by GoI, MoEFCC, Sub Office, Aranya Bhawan, Raipur vide F.No: 3-20/2008(Env)/1526 dated 28/11/2023 addressed to MOEFCC, New Delhi.		
Production Details from the inception of the mine			
S.no	Year	RoM Iron Ore (Million tons)	EC capacity (MTPA)
1	1967-68		-
2	1968-69		-
3	1969-70		-
4	1970-71		-
5	1971-72		-

6	1972-73		-
7	1973-74		-
8	1974-75		-
9	1975-76		-
10	1976-77	0.24	-
11	1977-78	2.89	-
12	1978-79	4.27	-
13	1979-80	3.79	-
14	1980-81	4.62	-
15	1981-82	4.78	-
16	1982-83	4.35	-
17	1983-84	4.25	-
18	1984-85	4.42	-
19	1985-86	4.42	-
20	1986-87	4.69	-
21	1987-88	4.69	-
22	1988-89	4.03	-
23	1989-90	3.92	-
24	1990-91	3.53	MoEFCC, New Delhi Letter no. J-11015/41/82-EN, 5 dated 28/02/1991
25	1991-92	4.92	-
26	1992-93	4.58	-
27	1993-94	5.16	-
28	1994-95	5.21	-
29	1995-96	5.56	-
30	1996-97	4.87	-
31	1997-98	5.45	-
32	1998-99	4.41	-
33	1999-2000	5.03	-
34	2000-01	6.09	-
35	2001-02	6.19	-
36	2002-03	6.67	-
37	2003-04	6.56	-
38	2004-05	6.74	-
39	2005-06	7.26	
40	2006-07	7.83	
41	2007-08	8.20	10 MTPA (MoEFCC, New Delhi Letter no. J-11015/261/2007-IA.II (M) dated 23/07/2007)
42	2008-09	6.55	
43	2009-10	7.08	
44	2010-11	8.09	
45	2011-12	7.72	

46	2012-13	6.94	
47	2013-14	6.83	
48	2014-15	6.82	
49	2015-16	6.49	
50	2016-17	7.99	
51	2017-18	8.41	
52	2018-19	7.62	
53	2019-20	7.84	
54	2020-21	8.04	
55	2021-22	8.32	
56	2022-23	8.66	
57	2023-24 (upto 9/2/2024)	7.456	

xiv. Rehabilitation & Resettlement (R&R):

R & R details	The project proponent has submitted that there is no R&R issues involved within the ML area.
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xv. Court case details:

Court Case, No and its present status	Nil
Undertaking by PP w.r.t court case	Affidavit dated 20/01/2024 submitted that “no court cases, Litigations are pending against the project”. (submitted in Revised EIA/EMP Report)

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	District Collector, South Bastar Dantewada District vide letter no: 1314 dated 26/09/2019 has issued show cause notice to Bailadila Deposit-5 for payment of Rs.419.97 Cr towards excess production done during 2000-01 to 2006 against common cause judgement. The project proponent vide letter dated 10/12/2019 has deposited part payment of Rs.426 Cr under protest in respect of both Bailadila Deposit-5 and Deposit-10 mines of NMDC to Dt. Collector, South Bastar Dantewada. The project has filled writ petition bearing number 1679/2020 dated 22/1/2020 in the Hon'ble High Court of Bilaspur to allow the present writ petition by setting aside the impugned notice dated 15/11/2019 for demand of penalty and
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	compensation towards excess production over the EC capacities.
Undertaking by PP in EIA/EMP report	Undertaking dated 20.01.2024 by PP is submitted in the Revised EIA/EMP Report.
Undertaking by Consultant in EIA/EMP report	Undertaking dated 17.01.2024 is submitted by Consultant in Revised EIA/EMP Report.

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

Particulars	Capital cost (Lakhs)	Recurring cost (Lakhs/annum)
Air Environment	2561.38	196
Noise Environment	--	100
Water Environment	4314	928
Waste dump management	564.74	92
Afforestation	5423	189
Energy conservation	661.64	62
Occupational Health	---	37
Environmental Monitoring	160	110.50
Total	13684	1714.50

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of public hearing)	136.84
Project Cost (Current Gross Block-441.58 Cr + Proposed Expansion cost -380.12 Cr)	821.70
Employment (No. s) Existing – 829 and proposed 88)	917

xix. The point-wise compliance in the following table as per the Ministry's OM dated 11thApril, 2022 under para 7(ii)(a) of EIA Notification, 2006, for expansion up to 50%, within the existing premises/ mine lease area, without additional land acquisition. The OM is applicable subject to fulfilment of following criteria:

Sr. No	Condition as per OM	Compliance of condition
1.	The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Public Hearing was conducted on 01.07.2006 for the production from 6.0 MTPA to 10.0 MTPA.

2.	There should not be change in Category of the project from 'B2' to 'B1' or 'A' due to proposed modernisation or expansion	There is no change in the category of the project.
3.	There is no additional land acquisition or forest land diversion involved for the proposed expansion or there is no increase in lease area with regard to mining vis-à-vis the area mentioned in the EC, based on which public hearing has been held earlier.	No Change in the Project Area.
4.	The proposed expansion shall not be more than 50% of production capacity as mentioned in the prior EC, issued on the basis of public hearing held and the same shall be allowed in minimum three phases.	PP has not obtained the expansion in production capacity on the basis of public hearing already held for the previous EC dated 01.07.2006.
5.	Predicted environmental quality parameters arising out of proposed expansion/modernization shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	Conducted during March to May 2022 representing Summer season
6.	The proposed expansion should not result in reduction in the greenbelt area as stipulated in the earlier EC, or if the existing ratio of greenbelt is more than 33%, after expansion it should not reduce below 33%.	No change in the green belt area.
7.	The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(s) and satisfactorily fulfilled all the commitments made during the earlier public hearing/consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/SPCB, which should not be more than one year old at the time of submission of application	Site inspection done on 16/09/2023 and CCR was issued on 28/11/2023.
8.	Public Consultation shall be undertaken [if applicable as per table below] by obtaining response in writing, as per para 7 III (ii) (b) of EIA Notification 2006, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Not applicable.
9.	Effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	Continuous Ambient Air Quality monitoring system installed at Mine.

- xx. PP has submitted that the Transportation of iron ore is mainly through the existing KK railway line (90% i.e 10.80 MTPA and a minor quantity by State/National highway road (10%, 1.20 MTPA).
- xxi. NMDC has funded an amount of Rs:1,013 crores for the doubling of the KK line between Kirandul to Jagdalpur & Jagdalpur to Ambagaon, covering a distance of 150 km, which will enhance the capacity of the railway line from 28 MTPA to 40 MTPA.
- xxii. NMDC is also coming up with the laying of a slurry pipeline from Bacheli to Nagarnar to Visakhapatnam for transportation of 15 million tons of beneficiated ore, which will increase evacuation capacity.

3. Observation and Recommendation of the EAC

The EAC, after deliberations observed that instant project is for expansion and PP has applied under OM dated 11.04.2022 for enhancement upto 20 % (Stage-1) capacity expansion under para 7(ii) of EIA Notification, 2006. The Committee noted that existing Biodiversity Conservation & Management Plan was approved during 2017 by State Govt and highlighted that PP needs to submit the authenticated list of Schedule-I species as per the Wildlife (Protection) Amendment Act, 2022 along with its conservation plan.

EAC also asked the PP regarding the demand raised by the District Collector vide letter dated 26.09.2019. The PP stated that the District Collector, South Bastar Dantewada District vide letter no: 1314 dated 26/09/2019 has issued show cause notice to Bailadila Deposit-5 for payment of Rs.416.97 Cr towards excess production done during 2000-01 to 2006-07 against common cause judgement. With regard to the above notice, the PP vide letter no: BC/Geo/2019-20/7263 dated 10/12/2019 has deposited part payment of Rs. 426 Cr under protest in respect of Bailadila Deposit-5 and Deposit- 10 mines of NMDC to District Collector, South Bastar Dantewada District, CG. Later, PP filed a writ petition bearing number: 1679/2020 dated 22/1/2020 in the High Court of Bilaspur to allow the present writ petition by setting aside the impugned notice for demand of penalty and compensation towards excess production over the EC capacities. Accordingly, the EAC asked the PP to submit the chronology of the court case along with specific amount that it has submitted with regard to the Bailadila Deposit-5, the instant mine lease which is under consideration for expansion.

The committee also observed the non-compliances enumerated in the CCR dated 28.11.2023 and accordingly advised PP to obtain closure report from Ministry's Regional Office. Based on the aforesaid discussions, the EAC **deferred** the proposal for want of following additional information: -

- i. PP needs to submit the closure report from Ministry's Regional Office with regard to non-compliances enumerated in the CCR dated 28.11.2023.
- ii. PP needs to submit an undertaking with regard to Ministry's OM dated 30.05.2018
- iii. PP needs to submit the authenticated list of Schedule-I species as per the Wildlife (Protection) amendment act, 2022 & proof of submission of Conservation Plan.

- iv. PP needs to submit the DMG authenticated past production details since inception of the mine.
- v. PP needs to submit the chronology of the court case along with specific amount that it has submitted with regard to the Bailadial Deposit-5, the instant mine lease which is under consideration for expansion.
- vi. PP needs to provide the number of crusher installed/proposed in the lease area along with their respective capacity.

Additional Agenda:

2.4 Lakhpat & Punharajpur Lignite Block and Limestone mine of M/s Gujarat Mineral Development Corporation Limited for a peak production capacity of 4.5 MTPA of Lignite and 29.81 MTPA of Limestone in the mine lease area of 2959.6715 ha, located at Villages Lakhpat, Kaner&Punharajpur, Tehsil: Lakhpat, District: Kutch, Gujarat – [F.No: IA-J-11015/29/2023-IA-II(NCM), Proposal No: IA/GJ/MIN/445103/2023; EIA Consultant: M/s Centre For Envotech and Management Consultancy Pvt. Ltd.] – Site visit Report

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

II. After detailed deliberations made by the PP during the 21st EAC-NCM meeting held during 18-19 October 2023, 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 PP 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 ingress, 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.

III. In view of the aforesaid recommendation of EAC, the Ministry constituted a sub-committee comprising of the following members to undertake the site visit during 24-28 January 2024:-

1. Shri Bandi Ramchandra Reddy, EAC Member
2. Prof. Devesh Walia, EAC Member
3. Shri Pankaj Verma, Scientist E & Member Secretary, EAC (NCM), MoEF&CC
4. Dr. Yogesh Kumar, Scientist C, MoEF&CC, Regional Office Gandhinagar
5. Shri Vidyasagar Jha, Research Officer, MoEF&CC

IV. The committee undertook the site visit during 24-28 January, 2024 and observed the following in the mine lease area:-

1. The mine lease area is located at Lakhpat, Kaner and Kaner & Punharajpur, Tehsil: Lakhpat, District: Kutch, Gujarat. The mine lease area is 2959.6715 ha.
2. The lease area is adjacent to State Highway 06 which is towards its northern side and State highway 42 passes within the eastern side of the lease in southern direction. The Kori creek is located in the western and northern direction, the shortest distance between the lease area and the creek is 1 km as informed by the PP during the site visit.
3. The Lakhpat fort is located in the northern side from the mine lease boundary and PP stated that it is at a distance of 165m. The fort has been declared as a protected monument by the Archaeological Department.
4. The committee observed the presence of water bodies within the lease area. The details submitted by the PP in this regard is given as under:-

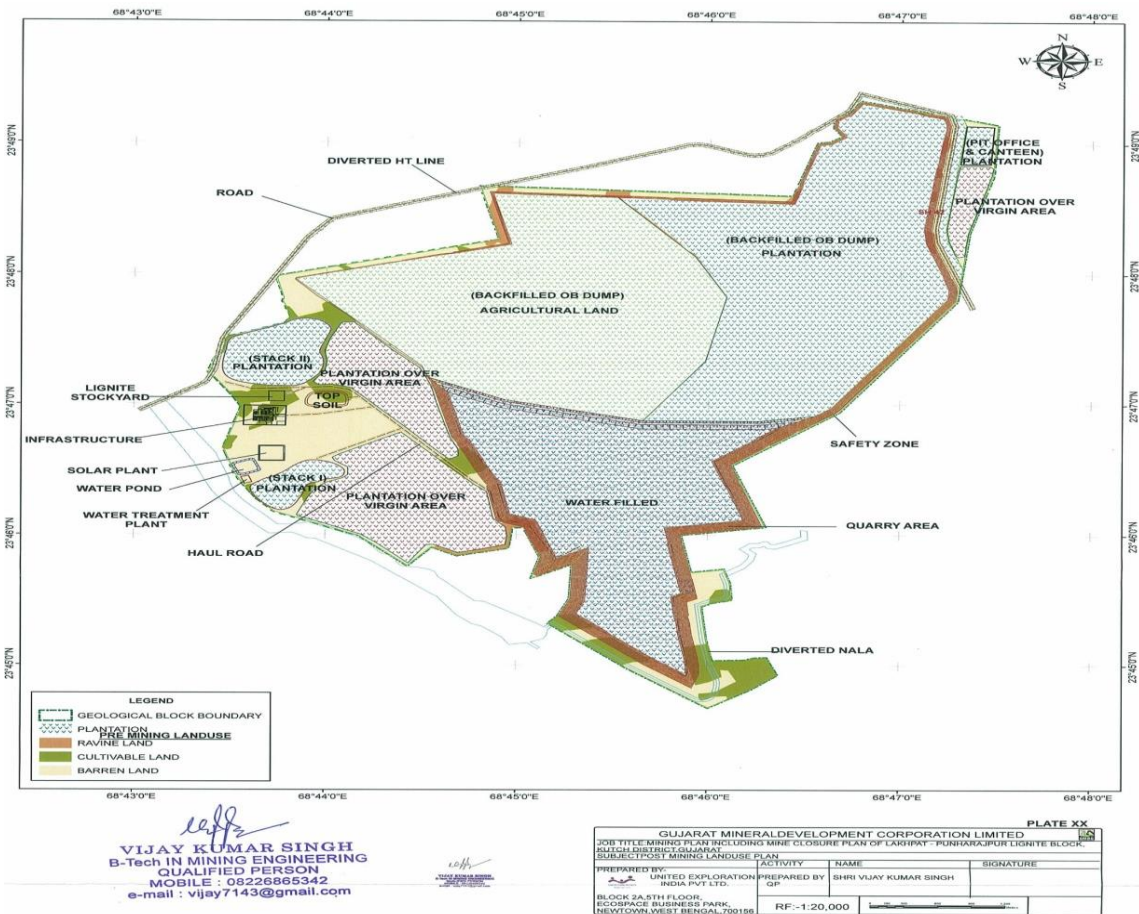
Waterbodies inside the lease					
Sl. No.	Particulars	Length	Width	Catchment area (Ha)	Remark
1	P1(Eastern side of Punharajpur village)	625m	450m	28.12	Check dam for villagers
2	P2(Northern side of Punharajpur village)	158m	65m	1.03	Pond
3	P3(NW side of Punharajpur village)	160m	88m	1.41	Pond
4	Tributary of Kali River	1.7km	40m	6.80	Seasonal

5. Sparse distribution of bushy vegetations was observed across the lease area. It was informed by the PP that the region receives hardly 200-300 mm of rainfall.
6. The sub-committee observed that the PP has erected boundary pillars alongside the ML boundary. The committee visited a couple of boundary pillars and matched its location with the hand held GPS Device.
7. The sub-committee also went through the mining plan during the site visit to know the proposed sequence of mining, total excavation, depth of mining, availability of mineral both lignite as well as limestone, waste/overburden generation and its handling, stock storage and its proposed transportation at ground level. The committee

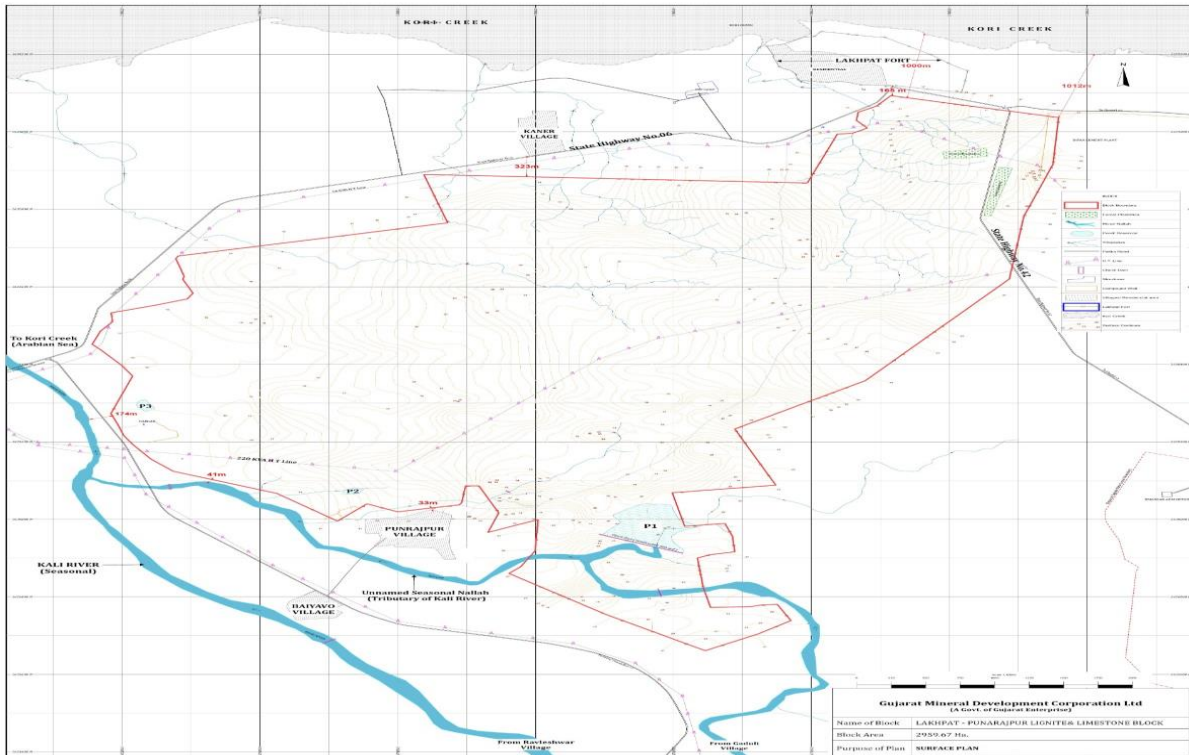
observed that the PP needs to clearly state the amount of overburden that they will handle till its reaches the RL to mine lignite.

	
<p>Sub-committee members at Pillar no:14 of ML Boundary</p>	<p>Sub-committee members at Pillar No-16</p>
	
<p>Proposed office site of the Mine</p>	<p>Visible bushy vegetation across the lease boundary</p>

8. The committee also noted that comprehensive material balance with regard to the overburden production and its handling was not available with the PP.



9. The PP also submitted the conceptual post land use mining plan that can be seen above.
10. The PP also provided the detailed map of the mine lease area indicating the presence of various roads, nallas creeks etc.



11. The committee also observed the existing pond in the southern side within the mine lease area. It was informed by the PP that they are going to shift the pond and use that area for mining purpose.
12. The PP also informed that the 80 % of the mined out limestone shall be supplied to the cement plant for which they have already floated an Expression of Interest. PP further mentioned that their cement plant is likely to start operation in the fifth year.
13. The committee did not observe any habitation within the mine lease area during the site visit.
14. The committee also noted the presence of Forest area that has been excluded from the lease.

V. Based on the aforesaid observation, the sub-committee recommended the following:-

1. The PP shall submit the comprehensive material balance with regard to the annual production of the both minerals, overburden/waste, top soil generated, depth of mining, 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 the minerals i.e. lignite as well as limestone.
2. The PP informed that they will be using SH 06 for transportation purpose along with NH 41, accordingly, PP shall submit the detailed transportation route for the proposed transportation of mined out minerals.
3. PP shall also undertake the carrying capacity study of the existing road to indicate its viability along with its pollution potential.
4. The PP shall submit the detailed timeline for shifting the pond outside the mine lease area. The capacity of the existing pond and the proposed pond along with its location needs to be provided by the PP.

5. PP shall undertake green belt plantation alongside the lease boundary and virgin area plantation.
6. PP shall also submit its action plan for mineral use in case it is unable to set up its Cement plant within next 5 years.
7. PP informed that mining activity will intersect ground water, accordingly PP shall undertake hydrological study to determine whether any sea water ingress will occur or not.
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.

2.4.1 The EAC accepted the recommendations of sub committee.

List of members of Expert Appraisal Committee participated through VC

S.No.	Member	Member Address	Designation	20 th	21 st
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	Name			February, 2024	February, 2024
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes
2	Sh. Niranjana Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, OPPOSITE Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171	Member	No	No
4	Shri. Avijit Ghosh (CMD-Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P. P. Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (CMD-South Eastern Coalfields Limited) (Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	No	No
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi- 110070	Member	Yes	No
7	Prof. Devesh Walia, Professor, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	No	yes

8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Viji Marg Rajinder Nagar, New Delhi - 110060	Member	Yes	Yes
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi II nd 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	Shri Pankaj Verma	2 nd Floor, Prithvi Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes
