



सत्यमेव जयते

Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Non-Coal Mining)



Minutes of AGENDA FOR 43rd MEETING OF THE EXPERT APPRAISAL COMMITTEE (NON- COAL MINING SECTOR), SCHEDULED TO BE HELD DURING 22nd-23rd April, 2025 THROUGH VIDEO CONFERENCING (VC) meeting No. 43
n-Coal Mining held from 22/04/2025 to 23/04/2025

Date: 03/05/2025

MoM ID: EC/MOM/EAC/413571/4/2025

Agenda ID: EC/AGENDA/EAC/413571/4/2025

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

22/04/2025	10:30 AM	06:00 PM
23/04/2025	10:30 AM	06:00 PM

1. Opening remarks

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

MINUTES OF THE 43rd MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 43rd meeting of the Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining

Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 22-23rd April 2025 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC, discussion on each of the Agenda Items was taken up ad-seriatim.

2. Confirmation of the minutes of previous meeting

Corrigendum in the minutes of the 39th EAC Meeting held on 15th January, 2025

(1.0) Limestone Mine (Block 3B2) for mining of Limestone with production capacity of 3.8 MTPA, Waste and Topsoil 4.887 Million M³ per annum in ML Area of 470.00 ha by M/s JSW Cement Ltd located near Village Sarasani, Tehsil Nagaur, District Nagaur, Rajasthan - For Extension of validity of EC Regarding. [Online Proposal No. IA/RJ/MIN/509467/2024, File No. J-11015/125/2018-IA. II (M), EIA Consultant M/s J. M. Environet Pvt. Ltd.]

The proposal was earlier appraised during the 39th EAC meeting held on 15.01.2025 wherein EAC recommended the validity extension of Environmental Clearance issued on 31.08.2020 for Limestone Mine (Block 3B2) for mining of Limestone with production capacity of 3.8 MTPA, Waste and Topsoil 4.887 Million M³ per annum in ML Area of 470.00 ha by M/s JSW Cement Ltd located near Village Sarasani, Tehsil Nagaur, District Nagaur, Rajasthan, as per EIA notification 2006 (as amended). However, validity duration of the EC was not specifically mentioned.

In view of the above, EAC in the 43rd EAC meeting held on 22-23 April 2025 **recommended** that an additional specific conditions shall be added at Agenda no. 1.7, Para 3 Specific Condition No. (ix) Page 149 of 272 Section no. 3.7.6.1 (specific condition) as specific condition no. ix as mentioned below in the 39th EAC minutes held during 15.01.2025:-

ix. The EC shall be valid till 09.04.2053.

Deliberation & Circulation of Earlier Minutes

(1.0) Deliberation & Circulation on the Minutes of 42nd EAC (Non-Coal Mining) Meeting held on 25th March 2025.

3. Details of proposals considered by the committee

Day 1 -22/04/2025

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Bhadrasahi Iron Ore and Manganese Ore Mines by THE ORISSA MINERALS DEVELOPMENT COMPANY LIMITED located at KENDUJHAR, ODISHA			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/533149/2025	23-212/2018-IA.III(V)	08/04/2025	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for Terms of Reference for Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.	
Location	Village	Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha (RF)
	Tehsil/Taluka	Barbil
	District	Keonjhar

	State / UT	Odisha
	Latitudes	21°58'47.97120'' to 22°01'40.35360''N
	Longitudes	85°21'26.50320'' to 85°24'26.21880'' E.
	SoI Topo sheet No.	F45H8 or 73F/8
Company's Name	The Orissa Minerals Development Company Ltd	
Accredited Consultant and certificate no. and Validity	Wolkem India Limited, NABET Certificate No: NABET/EI A/RA/24-27/ RA0361; Validity: 11.06.2027.	
KML file	Attached	
Seismic zone	II	

ii. Category details:

Category of the project	Category-A
Schedule No.	1 (a) (Mining of Minerals)
Mining lease Area (MLA) (in ha.)	998.70
General Conditions (if any)	Not Applicable

iii. ToR Details:

Project Proponent has obtained ToR vide F. No. 23-212/2018-IA.III (V) dated 23.11.2020.

PP has submitted that in light of MoEF&CC's Notification vide S.O. 221(E) dated 18th January 2021, it is stated that "Notwithstanding anything contained above, the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Terms of

Reference granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the said Terms of Reference shall be treated as valid.”

Hence, in effect the validity of TOR expired on 31.03.2025.

- Project Proponent has submitted the Draft EIA & EMP Report to Odisha State Pollution Control Board, Bhubaneswar.
- Project Proponent has also collected the Environmental Baseline data during October'2019 to December'2019.
- However, conducting PH within the validity of TOR period could not be accomplished in spite of regular attempts.
- PH was scheduled on 26.03.2025. However, PH was postponed by the Office of Collector and District Magistrate, Bhubaneswar.

iv. 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.		08.11.1941	Manganese	08.11.1941 to 30.09.1960	State Govt.	8.73 Sq. Miles
2.		09.04.1963	Manganese	01.10.1960 to 30.09.1980	State Govt.	7.11 Sq. Miles
3.	5058/III(A)MG-33/88	30.05.1988	Manganese	01.10.1980 to 30.09.1990	State Govt.	998.70 Ha
4.	14180/III(A) SM11/98	15.11.2000	Iron & Manganese	01.10.1990 to 30.09.2010	State Govt.	998.70 Ha.

5.	1262/SM/III(A)S M-09/2013	06.02.2020	Iron & Manganese	01.10.2010 to 30.09.2030	State Govt.	998.70 Ha.
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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		
i	Not Available	08.11.1941	30.09.1960	Manganese	8.73 Sq. Miles
ii	09.04.1963	01.10.1960	30.09.1980	Manganese	7.11 Sq. Miles
iii	Not executed	01.10.1980	30.09.1990	Manganese	998.70 Ha.
iv	03.02.2001	01.10.1990	30.09.2010	Iron & Manganese	998.70 Ha.

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

Private land	58.012 Ha
Government land	8.408 Ha
Forest land	932.027 Ha
Total Mining lease area (MLA), ha	998.447 (As per DGPS), 998.700ha (As per RoR)
Private land for crusher, workshop & other infrastructure outside the MLA	0.0

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/ DMG)	Letter No.	RMP-2352 /2024- 25/ IB M_RO _ BBS
	Date	24.03.2025.
	Mineral & (Major/ Minor)	Major
	Mine Lease Area, Ha	998.700
	Validity	30.09.2030
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Fully- Mechanized	
Drilling/Blasting	<p>Yes Shot/blast holes in single/multi rows on staggered pattern</p> <p>Iron Ore</p> <p>Drill Depth: 9.9 m Drill Dia: 150 mm Charge/Hole: ~56.6 kg (slurry) Powder Factor: >6 t/kg Pattern: Staggered, Broad 'V'</p> <p>Explosive Type: Slurry Explosives</p> <p>Stemming Length:3m</p> <p>Manganese Ore</p> <p>Drill Depth: 6.6 m Drill Dia: 100 mm</p>	

	<p>Charge/Hole: ~20.8 kg (slurry)</p> <p>Powder Factor: >5 t/kg</p> <p>Pattern: Staggered, Broad 'V'</p> <p>Explosive Type: Slurry Explosives</p> <p>Stemming Length:3m</p>
Geological Reserves	Iron 81.21Million Tonnes & Mn 12.24 Million Tonnes
Mineable Reserves	Iron 77.046 Million Tonnes & Mn12.17 Million Tonnes
Breakup of Total Excavation (Top soil/ OB/ SB/ IB/ Mineral Rejects/ Waste, MTPA)	3132800 TPA
Life of mine	43 years for iron ore section. 101 years for Manganese ore section
Mine Bench Height & Bench Width	<p>Height & width of benches - Iron ore is 6m & 9m</p> <p>Height & width of benches Manganese ore 3m & 3m</p>
Details of ground water intersection	No
Individual bench slope	
Overall pit slope	45 deg

Details of existing/ proposed Crusher	Proposed 02(two) nos. of Crusher of 250 TPH each.
Mineral Beneficiation	No
RoM output size	
Transportation details including capacity of dumper/tipper, mode of transport and distance	By Road & Railways
Generation of Topsoil/OB & its Management during plan period & conceptual period	No Topsoil
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	As per approved Mine Plan

vii. Water requirement:

Total water requirement	200 m3/day	Fresh water	200 m3/day
		Treated water	---
Source	Water requirement for the proposed project for industrial purposes has been estimated to be 200 m3/day, whereas potable water demand has been estimated to be 150 m3/day. The water will be drawn from nearby pond / Suna Nadi (also called Kundru Nala) which a perennial stream flowing adjacent to the lease's southern and eastern boundaries and remaining 50 m3/day will be sourced from bore well/tubewell.		
Permission for withdrawal/ intersection	Under progress		

on along with details of grant and its validity

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

Particulars	Particular's Name	Distance & Directions
Village	Kolha Roida, Bhuyan Roida, Kundrupani, Chhattabara, Bichakundi & Sidhamatha (RF)	Within M.L area
Town	Joda	1 KM
Highway	SH 108 NH 520	3.35 Km from the N lease area 2.7 K.M N
Interstate Boundary	Odisha-Jharkhand interstate boundary	10.8 KM
Railway Station/ Railway line	Banspani Railway Station	2.90 Km in ESE
Water Bodies	<ol style="list-style-type: none"> 1. Suna Nadi 2. Karo River 3. Baitarani River 4. Suna Nala 5. Kundru Nala 6. Dalki Nala 7. Kakarpani Nala 8. Kalmang Nala 9. Topadihi Nala 10. Gamle Nala 	<p>Within ML E.</p> <p>6.94KM NW</p> <p>6.21KM E</p> <p>3.18KM S</p> <p>Within ML S</p> <p>2.28KM ENE</p> <p>5.54KM SE</p> <p>4.72KM S</p>

		5.79KM SW 5.49KM W 5.61KM WNW
Forest	<ol style="list-style-type: none"> 1. Sidhamatha R.F.: M.L. 2. Baitarani R. F.: 3. Thakurani R. F. 4. Lakhraghat R.F. 5. Karo R.F. 6. Chamakpur R.F. 7. Mendhamaruni R.F. 	<p>Within this R.F.</p> <p>Adjacent on SE</p> <p>2.7 km N</p> <p>1.2 km W</p> <p>9.6 km NW</p> <p>7 km SE</p> <p>9.5 km SW</p>

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	Yes	PP has obtained Forest Clearance vide letter no.8-18/96-FC dated 26.02.1998 over 702.053ha.
National Park	NO	The PP has submitted an authenticated map of Orissa showing the distance of the Bhadrasahi Iron & Manganese Mine of M/s O.M.D.C. Ltd. (In Keonjhar District Of Orissa) from the National Park/ Sanctuaries and Elephant/ Tiger Reserve and their corridors.
Wildlife Sanctuary	NO	
Elephant/Tiger Reserve	NO	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	NO	

Coastal Regulation Zone (CRZ)	NO	
Schedule-I species (Nos and name of schedule-I species with authenticated letter)	Yes	PP has submitted approved Site Specific wildlife Conservation Plan by PCCF (WL) vide letter no.748 7/1WL(CC) SSP-281/2012 dated 30.09.2014.
Wildlife Conservation Plan	Yes	PP has submitted approved Site Specific wildlife Conservation Plan by PCCF (WL) vide letter no.748 7/1WL(CC) SSP-281/2012 dated 30.09.2014.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Area 18 Ha, sapling 28800
Budget for green plant & plantation till the end of life of mine.	1 Cr & As per E.C conditions
Budget for nursery	50 Lakhs
Details of existing plantation and its survival rate	80 %
No. of tree cuts in the mine lease area and compensatory afforestation	As per F.C
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	Plantation will be as per approved Mining Plan
50 m safety zone of nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	2025
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post Monsoon
Predominant Wind direction (From)	
Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	8
Soil Quality (no. of locations) and results	6
Hydro geological study and results	In Post monsoon 2025
Traffic study (no. of locations) and results	In Post monsoon 2025

xii. Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Year	Production in MT	
		Iron Ore	Manganese Ore
	1989-90	124736.160	22971.000
	1990-91	142468.930	30089.000
	1991-92	117467.940	31829.000

1992-93	128050.360	46535.537
1993-94	32340.000	39481.200
1995-96	66008.000	39812.500
1996-97	80017.720	60923.523
1997-98	142416.000	94205.000
1998-99	77646.910	42019.480
1999-00	94793.000	34265.000
2000-01	52110.000	9630.000
2001-02	0.000	35775.000
2002-03	0.000	34948.000
2003-04	533692.000	52550.000
2004-05	639200.000	27234.000
2005-06	480730.000	18985.000
2006-07	744450.000	16102.000
2007-08	1433000.000	21304.000
2008-09	575400.000	62890.000
2009-10	299950.000	19150.000

	2010-11	23538.0000	13225.000
	2011-25	0.000	0.000

xiii. Rehabilitation & Resettlement (R&R):

R & R details	Not applicable
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xiv. Court case details:

Court Case, No and its present status	Case 2(C) CC No.-98/2013 Pending JMFC- Barbil.
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xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent has submitted the affidavit vide letter dated 07.04.2025
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xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
	3.0	100

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	4.0 (Approx)
Project Cost	133.59

Employment (No.s)	163
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3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

The Expert Appraisal Committee (EAC) deliberated on the proposal for Terms of Reference (ToR) for the Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.

During the deliberations before the EAC of the NCM sector, it was noted that the mining lease area covers a total of 998.447 ha, according to DGPS, with a breakdown of 58.012 ha of private land, 8.408 ha of government land, and 932.027 ha of forest land. The infrastructure required for the project, such as crushers and workshops, will be situated entirely within the lease area, with no private land being used outside of this. The mining method proposed is opencast, fully-mechanized, involving drilling and blasting for both iron ore and manganese ore. As per the PP the reserves of iron ore stand at 81.21 million tonnes, and manganese ore reserves at 12.24 million tonnes. The mine will be operated with varying bench heights and widths, with an overall pit slope of 45 degrees to ensure safety during excavation.

PP reported that the mining operation will employ two crushers, each with a capacity of 250 TPH, and the transportation of materials will be carried out through both road and rail. The water requirement for the project has been estimated at 200 m³/day, with the primary source being the Suna Nadi stream, located near the southern and eastern boundaries of the lease area. Additionally, 50 m³/day will be sourced from borewells. The Project Proponent is in the process of obtaining the necessary permissions for water withdrawal. The total annual excavation will generate about 3.13 million tonnes of material, which includes mineral rejects and waste. These materials will be managed as per the approved mining plan, with no topsoil expected to be generated.

The project is located near various water bodies such as the Suna Nadi, Karo River, and Baitarani River, and within several forest reserves like Sidhamatha and Baitarani R.F. However, the area is not situated near any national parks, wildlife sanctuaries, or elephant/tiger reserves. In terms of ecological sensitivity, it was confirmed that no eco-sensitive zones or protected areas are within the vicinity. A

detailed wildlife conservation plan has been approved, ensuring the project addresses any potential environmental impacts.

PP submitted that the mining operation will adhere to the guidelines provided under the Forest Clearance, including compensatory afforestation, and will avoid unnecessary tree cutting. As per the PP, the capital cost for the Environmental Management Plan (EMP) is estimated to be 4.0 crores, with an annual recurring cost of 1.0 crore. In terms of project costs, the overall estimate stands at 133.59 crores, and the mine will provide employment to 163 individuals, contributing to the local workforce.

The Project Proponent (PP) informed the EAC that they had previously obtained the Terms of Reference (ToR) for the project under the Ministry's notification S.O. 804 (E) dated 14.03.2017, via letter no. 23-212/2018-IA.III(V) dated 23.11.2020. The ToR was issued under the violation category, with its validity expired on 31.03.2025. The PP further submitted that, in accordance with the expiration of the ToR, they have submitted an application for fresh ToR through the Parivesh portal on 08.04.2025.

The EAC acknowledged the PP's submission and enquired why the EC application was not submitted within the stipulated time. The PP responded by stating that the public hearing for the project had been deferred multiple times by the State Authorities, which ultimately prevented them from submitting the Environmental Clearance (EC) application. The PP added that after completing the EIA-EMP report, they had made repeated requests to the State Pollution Control Board (SPCB) and District Authorities for scheduling the public hearing. However, they were not provided with a specific date for the hearing. The PP further mentioned that in March 2025, the State Authorities had informed them that the public hearing was scheduled for 26.03.2025, just five days before the expiry of the ToR. Unfortunately, this schedule was also cancelled by the District/ State Authorities.

In response to the submission, the EAC noted that the Ministry had granted the ToR under the violation notification S.O. 804 (E) dated 14.03.2017, which had a special window period. Since the window period for this notification had now passed, the EAC highlighted that the matter could no longer be considered under the said notification.

In view of the above, EAC decided to **return the proposal in its present form**, as the project does not meet the required conditions for further consideration under the existing guidelines and judicial orders.

3.1.5. Recommendation of EAC

Returned in present form

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Limestone Mine 889.76 Hectare Village Jamuani Khurd, Chari, Durjanpur, and Padrehi by Birla Corporation Limited located at KATNI,MADHYA PRADESH			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/MP/MIN/533338/2025	J-11011/252/2009-IA.II(I)	10/04/2025	Mining of minerals (1(a))

3.2.2. Project Salient Features

The instant proposal for Amendment in Environmental Clearance for Limestone Mine with production of 5.64MTPA in the ML area of 889.77ha by M/s RCCPL Private Ltd located at village Jamuani Khurd, Chari, Durjanpur, and Padrehi, in District Katni, Madhya Pradesh.

The EC for the mine has been transferred to M/s RCCPL Pvt. Ltd. Vide F.No. J-11011/252/2009-IA-II (I) dated 20.01.2025. The project proponent has proposed the following amendments:

S.No.	As per the EC	Amendment proposed by PP
1.	The entire limestone production of 5.64 MTPA was proposed to be transported from the crusher to the cement plant through the conveyor belt.	The whole limestone production of 3 MTPA is proposed to be transported from the crusher to another existing Sadhera mine of proponent (RCCPL Private Ltd.), which is located at about 13.5 km from the mining lease.
2.	The EC was granted for a production capacity of 5.64MTPA	A reduced production capacity of 3 MTPA is requested.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	Limestone Mine having lease area of 889.76 Ha by RCCPL Private Limited.	
Location	Village	Jamuani Khurd, Chari, Durjanpur, and Padrehi
	Tehsil/Taluka	Vijayraghavgarh

	District	Katni
	State / UT	Madhya Pradesh
	Latitudes	24°03'42.507"N to 24°06'38.69
	Longitudes	80°39'40.480"E to 80°43'3.432
	SoI Topo sheet No.	G44U12
Company's Name	RCCPL Private Limited	
Accredited Consultant and certificate no. and Validity	Perfact Enviro Solutions Pvt Ltd. NABET/EIA/2225/RA 0284 (Rev. 01) valid upto 26.11.2025	
KML file	Attached	
Seismic zone	II	

ii. Category details:

Category of the project	A
Schedule No.	1 (a) -Mining of mineral
Mining lease Area (MLA) (in ha.)	889.76
General Conditions (if any)	Not Applicable

iii. EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of the accord
03/12/2010	IA/MP/IND/3723/2010	-	F.No.J-11011/252/2009-IA-II(I)	03/05/2011
24/04/2018	IA/MP/IND/73595/2011	-	F.No.J-11011/252/2009-IA-II(I)	07/08/2018
01/12/2023	IA/MP/MIN/443201/2023	-	F.No.J-11011/252/2009-IA-II(I)	20/01/2025

iv. Details of Mine Lease in a 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.	Original lease granted	26.03.2011	Major	30 years from the date of grant of issuance	State Government of Madhya Pradesh	889.76
2.	Lease Transfer Deed	17.05.2023	Major	30 years, will be extended up to 50 years as per MMDR Act	State Government of Madhya Pradesh	889.76

S.No	Details of the grant of the Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	F 3-4/2009/12/2	11/11/2011	10/11/2041	Limestone	889.76

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

Private land	856.21 Ha
Government land	33.55 Ha
Forest land	00
Total Mining lease area (MLA), ha	889.76
Private land for crusher, workshop & other infrastructure outside the MLA	NA

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by the Indian Bureau of Mines/DMG)	Letter No.	MP/Katni/Limestone/RMP-33/2022-23/2367
	Date	18.08.2022
	Mineral & (Major/Minor)	Major
	Mine Lease Area, Ha	889.76
	Validity	Period from 2021-22 to 2025-26
Additional information (if any)	NA	
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized mining	
Drilling/Blasting	Fully Mechanized open-cast mine using HEMM and deep hole drilling-blasting.	
Geological Reserves	444.86 MT (Geological resources)	
Mineable Reserves	142.16 MT	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation- 5.04 million TPA (Comprising 3.00 million TPA of limestone, 2.04 million TPA of Waste, including Soil).	
Life of mine	50 Years	
Mine Bench Height & Bench Width	The height of the bench is 8 m, working width 20 m to 25 m	
No. of Mine Benches	5	
Existing Depth, m bgl	3.2 m bgl to 18 m bgl	
Ultimate Depth of Mining, m bgl	40 m bgl.	
Ground Water Table, m bgl	38 to 45 m bgl	

Details of groundwater intersection	There may be no water table intersection; a detailed hydrogeological report will be prepared.		
Individual bench slope	70°		
Overall pit slope	45°		
Details of existing/ proposed Crusher	A 900 TPH Crusher will be installed within the mining lease area.		
Mineral Beneficiation	NA		
RoM output size	70 mm		
Transportation details, including the capacity of the dumper/tipper, the mode of transport, and the distance	About 4 dumpers (60 tons capacity) for internal transportation and 15 dumpers (38 tons capacity) will be required for the transportation of limestone from the crusher to the existing mine of the same company, which is located at about 13.5 km.		
Generation of Topsoil/OB & its Management during the plan period & conceptual period	Max. 2011475 Tons per annum of waste and Max 26712 TPA of topsoil will be generated, which will be removed separately and stored at the place earmarked for it. Soil will be used for green belt development. The waste dump will be suitably planted with trees and shrubs.		
Generation of Mineral Rejects/ Waste & its Management during the plan period & conceptual period	There will be no rejection from the mine.		

vii. Water requirement:

Total water requirement	24 KLD	Drinking and Sanitation	4 KLD
		Mine operation	2 KLD
		Dust suppression	13 KLD
		plantation	5 KLD
Source	Total water requirement for the mine will be around 24 KLD, which will be sourced through the mine pit water and borewell (20 KLD of mine pit water, 4 KLD of Fresh Water from		

	m the borewell for domestic use).
Permission for withdrawal/ intersection, along with details of the grant and its validity	There will be intersection of groundwater in the next 5 to 10 years as the water level is in a range of 38 m bgl to 45 m bgl, whereas the ultimate pit depth is about 40 m bgl

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

Particulars	Particular's Name	Distance & Directions
Village	Jamuwani Khurd	Near the project Boundary
Town	Kaymur	5.50 Km SW
Highway	NH-30 (Topo Map in NH-7)	6.97 Km NW
Interstate Boundary	NA	NA
Railway Station/Railway line	Jhukehi Railway Station	24.85 km WSW
Water Bodies	Jarjarar Nala Pond near Durjanpur Pond near karitalai Laalti Kund Jhapawan Nala Pond near Kymore Pond near Bamhouri Pond near Paraswara Tons or Tamasa River Pond near Harduwa Chakdahi Nala Mahanadi River Kalindari N Saguhai Pond Domna Nala Ghusru N Ban Sagar lake	0.19 Km ESE 0.83 Km SSE 1.66 Km South 1.78 Km WNW 2.56 Km South 3.52 Km WNW 3.74 Km ESE 4.27 Km SSE 4.48 Km NNW 5.86 Km ESE 5.99 Km ENE 7.57 Km South 8.15 Km ENE 8.48 Km WSW 8.53 Km ESE 9.49 Km North 10.76 Km ESE
Forest	Hardua Reserved Forest Banjari Reserved Forest	4.67 Km SE 6.21 Km SW

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 Letter no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh that No forest land is involved within the Mine lease area.
National Park	No	Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh that No National Parks, Wildlife Sanctuaries, Elephant Corridors, Biosphere Reserves, etc. within 10 km radius of the Mine lease area of M/s RCCPL.
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	<p>Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh to submit an authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Act of 2022.</p> <p>Pavo cristatus (Indian Peafowl) as per authenticated Conservator of Forest letter no. 1581 dated 28.02.2011.</p>
x. Green belt/ plantation details:		
Proposed area for green belt/plantation and no. of saplings proposed	<p>At the end of mining, out of the total mined-out area, 122.20 ha of area will be afforested.</p> <p>It is proposed to plant about 3, 05,500 saplings in our Mines Lease area.</p> <p>Survival rate: 80%</p>	
Budget for green plant & plantation till the end of life of mine.	Rs 957 Lacs	
Budget for nursery	Nil	
Details of existing plantation and its survival rate	2100 (survival rate is 80 %)	

No. of tree cuts in the mine lease area and compensatory afforestation	2800 trees will be cut in the mine lease. A total of about 3, 05,500 saplings will be planted up to the conceptual period.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	63.24 ha
50 m safety zone of nallah, roads, electric lines	NA
500 m safety zones of nearest habitation villages	NA

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	15 February to 15 March 2025
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season(One Month data)
Predominant Wind direction (From)	NW
Ambient Air Quality (no. of locations) and results	<p>No. of locations - 8</p> <p>Locations were as follows:</p> <p>A1 - Padrehi (Onsite)</p> <p>A2 - Jamuwani Khurd</p> <p>A3 - Ghorbai</p> <p>A4 - Chari</p> <p>A5 - Durjanpur</p> <p>A6 - Karitalai</p> <p>A7 - Manaura</p> <p>A8 - Tikat</p>

Results-

The ambient air quality results are summarized below :

A1- Padrehi:- The mean value of PM10 is 75.73 g/m³, PM2.5 range is 24.49 g/m³, SO₂ range is 8.46 g/m³, NO₂ range is 16.85g/m³ & CO range is 0.51 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Padrehi village is found to be Satisfactory during the sampling campaign.

A2- Jamuwani Khurd:- The mean value of PM10 is 80.22 g/m³, PM2.5 range is 25.94 g/m³, SO₂ range is 8.96 g/m³, NO₂ range is 17.84 g/m³ & CO range is 0.54 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Jamuwani Khurd village is found to be Satisfactory during the sampling campaign.

A3- Ghorbai:- The mean value of PM10 is 89.99 g/m³, PM2.5 range is 29.40 g/m³, SO₂ range is 10.15 g/m³, NO₂ range is 20.23 g/m³ & CO range is 0.61 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Ghorbai village is found to be Satisfactory during the sampling campaign.

A4- Chari:- The mean value of PM10 is 71.40 g/m³, PM2.5 range is 23.08 g/m³, SO₂ range is 7.97 g/m³, NO₂ range is 15.88 g/m³ & CO range is 0.48 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Chari village is found to be Satisfactory during the sampling campaign.

A5- Durjanpur:- The mean value of PM10 is 89.96 g/m³, PM2.5 range is 28.92 g/m³, SO₂ range is 11.11 g/m³, NO₂ range is 22.12 g/m³ & CO range is 0.66 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Durjanpur village is found to be Satisfactory during the sampling campaign.

A6- Karitalai:- The mean value of PM10 is 83.57 g/m³, PM2.5 range is 27.43 g/m³, SO₂ range is 11.11 g/m³, NO₂ range is 18.87 g/m³ & CO range is 0.66 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB the air quality of the Karitalai village is found to be Satisfactory during the sampling campaign.

A7- Manaura:- The mean value of PM10 is 89.01 g/m³, PM2.5 range is 30.52 g/m³, SO₂ range is 10.54 g/m³, NO₂ range is 21 g/m³ & CO range is 0.57 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Manaurai village is found to be Satisfactory during the sampling campaign.

A8- Tikat:- The mean value of PM10 is 89.55 g/m³, PM2.5 range is 28.95 g/m³, SO₂ range is 10.01 g/m³, NO₂ range is 19.92 g/m³ & CO range is 0.60 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Tikat village is found to be Satisfactory during the sampling campaign.

Noise level (no.

No. of locations - 11

of locations) and results	<p>Locations were as follows:</p> <p>N1 - Padrehi</p> <p>N2 - Chari</p> <p>N3 - Kymore to Bhandanpur PWD Road</p> <p>N4 - Dhawal</p> <p>N5 - Dhanwahi</p> <p>N6 - Jamuwani Khurd</p> <p>N7 - Durjanpur</p> <p>N8 - Karitalai</p> <p>N9 - Paraswara</p> <p>N10 - Basaundha</p> <p>N11 - Tikat</p> <p>Results-</p> <p>Core Zone (Industrial Area): N1 & N2: The ambient noise level during daytime at the proposed project site varies from 39.5 dB (A) to 42.5 dB (A), which are within the standard limit of the Industrial area, ~ 75 dB (A). During night, the noise level at the project site ranges from 35.2 dB (A) to 39.3 dB (A), which are within the standard limit of Industrial area 70.0 dB (A).</p> <p>Buffer Zone:</p> <p>Commercial Area: N3- The ambient noise level during daytime at the commercial area is 61.6 dB, which is within the standard limit of the commercial area, ~ 65 dB (A). During the night, the noise level at the commercial area ranges is 56.7, which is slightly higher than the standard limit of commercial area 55 dB (A).</p> <p>Residential Area: N4 to N11- The ambient noise level during daytime at the residential area varies from 40.1 dB (A) to 49.7 dB (A), which are within the standard limit of residential area ~ 55 dB (A). During night, the noise level at the residential area ranges from 35.7 dB (A) to 40.8 dB (A), which are within the standard limit of a residential area of 45 dB (A).</p>
Water Quality (no. of locations) and results	<p>No. of GW locations - 9</p> <p>No. of SW locations - 5</p> <p>Locations for Groundwater-</p> <p>GW1- Padrehi</p> <p>GW2- Ghorbai</p> <p>GW3- Chhari</p> <p>GW4- Durjanpur</p> <p>GW5- Manaura</p> <p>GW6- Horaiya</p> <p>GW7- Karitalai</p> <p>GW8- Paraswara</p>

GW9- Kherhal

Locations for Surface water-

SW1- Pond near Chari

SW2- Pond near Manaura

SW3- Jhapawan Nallah

SW4-Mahanadi River-Upstream of intake point

SW5-Mahanadi River-Downstream of intake point

GW Results-

The Total Dissolved Solids (TDS) of the sampling locations W1 to W9 range from 271 mg/l to 635 mg/l, which are found within the drinking water standard of Permissible limit (IS:10500), i.e., 2000 mg/l.

The Total Hardness of the sampling locations ranges from 200 mg/l to 484 mg/l, which are found within the drinking water standard of the Permissible limit (IS: 10500), i.e., 600 mg/l.

The Alkalinity of the sampling locations ranges from 186.20 mg/l to 436 mg/l, which are found within the drinking water standard of the permissible limit (IS: 10500), i.e., 600 mg/l.

The Fluoride content in the sampling locations ranges from 0.01 mg/l, which is below the detection limit, the drinking water standard of the Permissible limit (IS:10500) i.e. 1.5 mg/l.

The Calcium Concentration of sampling locations ranges from 48 mg/l to 96 mg/l. Calcium levels of sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 200 mg/l.

The Magnesium Concentration of sampling locations ranges from 19 mg/l to 52 mg/l. Magnesium levels of sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 100 mg/l.

The Chloride Concentration of all the sampling locations ranges from 71 mg/l to 133 mg/l. Chloride levels of all the sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 1000 mg/l.

SW Results-

Surface water samples were derived from 5 locations in different surface water bodies within study area, analysis results of the same revealed that pH values amongst all samples varied in the range of 7.04 - 7.97, Total Hardness concentration varied in the range of 56 mg/l to 304 mg/l & TDS concentration varied in the range of 93 to 432 mg/l. Electrical Conductivity was found to be ranging in between 143 to 664 mS/cm, BOD concentration varied in the range of 1.35 mg/l to 2.5 mg/l, DO concentration varied in the range of 3.3 mg/l to 5.7 mg/l,

The surface water samples fall under classes B, C, and E (i.e., B- Water is suitable for Outdoor bathing, C- Drinking water source after conventional treatment and disinfection, and E- Irrigation, Industrial Cooling,

	Controlled Waste disposal) as per CPCB surface water criteria.
Soil Quality (no. of locations) and results	<p>No. of locations - 10</p> <p>Locations were as follows:</p> <p>S1- Chari</p> <p>S2- Jamuwani Khurd</p> <p>S3- Padrehi</p> <p>S4- Durjanpur</p> <p>S5- Karitalai</p> <p>S6- Dhanwahi</p> <p>S7- Horaiya</p> <p>S8- Paraswara</p> <p>S9- Near Karitalai Village</p> <p>S10- Kherhal</p> <p>Results-</p> <p>Core Zone: The samples collected from the core zone sites show that the soil texture in the core zone is Clay, Color is 6/4 Dull Orange and 5/2 Greyish Brown, pH is between 6.77 - 7.28 Amount of primary nutrients like Organic matter is 1.20 - 1.43 %, the available nitrogen 110.6 to 124.6 mg/kg is low and available Potassium 16.9 to 29.9 mg/kg is low while the available Phosphorus 5.2 to 8.8 mg/kg is in low to medium range. Thus, it can be concluded that the soil is average fertile in the Core Zone.</p> <p>Buffer Zone: The samples collected from the buffer zone sites show that the soil texture in the buffer zone is Silt Loam, Silty Clay Loam, Clay, Silty Clay, sandy Loam Color is 6/3 Dull Orange, 7/2 Light Brownish Grey, 6/2 Greyish Brown, 7/1 Light Brownish, 5/4 dull Reddish Brown pH ranges from 6.84 to 7.78. Amount of primary nutrients like Organic matter 1.13 to 2.80 %, the Available Nitrogen 92.60 mg/kg to 198.40 mg/kg is medium in range, the Available Phosphorus 4.3 mg/kg – 17.6 mg/kg is low to high in range, Available Potassium 21.70 mg/kg to 71.6 mg/kg is low to medium in range, Primary nutrient profile shows that soil is average fertile due to the availability of low amount of nitrogen, available potassium.</p>
Hydro geological study and results	There may be an intersection of the water table, as the minimum level of the water table is 38 to 45 m bgl, as per the approved mining plan. The ultimate level of excavation will be 40 m bgl. (The maximum depth of mine will be reached at the conceptual stage).
Traffic study (no. of locations) and results	<p>1- No. of locations</p> <p>Kymore to Bhandanpur PWD Road</p>

	LOS of location (Kymore to Bhandanpur PWD Road) - is “A”, and After Commissioning of the project LOS category of the Project will remain the same Category “A”
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xii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Details of the Letter, along with the date of grant and validity
Consent to Establish	PP has obtained CTE- Consent No:CTE-56700 grant consent up to dated Dt.20/09/2022
Consent to Operate	Pp has obtained the Consent No: AW-58912 grant consent up to dated 14/12/2025
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Project Proponent has submitted the past production detail vide letter dated 06.01.2024 authenticated by Office of the Collector (Mineral Division), District-Katni, State-Madhya Pradesh

xiii. Rehabilitation & Resettlement (R&R):

R & R details	Assets will be procured on a mutually agreeable basis keeping in mind the provisions of applicable Acts and Rules.
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xiv. Court case details:

Court Case, No and its present status	No pending litigations against the project.
Undertaking by Project Proponent w.r.t court case	Project Proponent has submitted an undertaking for No pending litigations against the project attached as Annexure VII in letter dated 23.04.2025.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit vide letter dated 17.04.2025
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xvi. Details of the Environmental Management Plan (EMP): The Detail of EMP budget for EIA to mitigate the environmental impacts given below.

S.No.	Particulars	Capital Cost (Lakhs)	Annual recurring cost (Lakhs)
1	*Pollution Control (Water Sprinkling, Retaining wall, Fencing, and Garland drain, Anti-smog gun, Bag filters, STP, CAAQMS etc.)	188	78
2	Environment Monitoring	-	7.0
3	Green Belt within the ML area	957	43
	Total	1145	128.00

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP)	EMP Cost (Capital) -Rs 1145 Lakhs
Project Cost	Rs 204.04 Crores
Employment (Nos)	107 nos.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

The instant proposal is for amendment of Environmental Clearance for Limestone Mine with production of 5.64MTPA in the ML area of 889.77ha by M/s RCCPL Private Ltd located at village Jamuani Khurd, Chari, Durjanpur, and Padrehi, in District Katni, Madhya Pradesh.

As part of the deliberations of the Expert Appraisal Committee (EAC) of the Non-Coal Mining (NCM) sector, the Committee noted the chronology of the mining lease for the limestone project by M/s RCCPL in Katni district, Madhya Pradesh. The original mining lease was granted on 26.03.2011 for a period of 30 years over an area of 889.76 ha. Subsequently, the lease was transferred through a deed dated 17.05.2023, and as per the provisions of the MMDR Amendment Act, 2015. The lease deed was executed on 11.11.2011 and is valid till 10.11.2041. The mining lease area comprises 856.21 ha of private land and 33.55 ha of government land; no forest land is involved.

The mining plan, including the progressive mine closure plan, was approved by IBM under Letter No. MP/Katni/Limestone/RMP-33/2022-23/2367 dated 18.08.2022. The approved plan covers the period 2021–22 to 2025–26 and proposes opencast, fully mechanized mining involving HEMM and deep-hole drilling and blasting. The geological resources are estimated at 444.86 million tonnes, with mineable reserves of 142.16 million tonnes. The mine will operate with a total excavation of 5.04 MTPA (comprising 3.00 MTPA of limestone and 2.04 MTPA of waste), with a projected life of 50 years. The mine will reach an ultimate depth of 40 m bgl, while the groundwater table ranges between 38–45 m bgl; intersection with groundwater is anticipated in 5–10 years. A 900 TPH crusher is proposed within the lease area, and about 19 dumpers of 38–60T capacity will be used for internal and external transport.

The total water requirement is 24 KLD, sourced from mine pit water (20 KLD) and borewell water (4 KLD). No forest land or protected areas fall within the mine lease area, and there are no notified eco-sensitive zones, wildlife sanctuaries, or national parks within 10 km. However, Indian Peafowl (*Pavo cristatus*), a Schedule-I species, has been reported in the study area. The project proponent has submitted a request to the DFO, Katni, for an authenticated list of flora and fauna in compliance with the Wildlife (Protection) Amendment Act, 2022.

The greenbelt and plantation plan proposes afforestation of 122.20 ha of mined-out area with 3,05,500 saplings by the conceptual period, with an estimated budget of ₹957 lakh. Around 2800 trees are to be felled, and compensatory afforestation will be carried out. The plantation will cover 63.24 ha in the 7.5 m barrier and non-mineralized zone.

Baseline environmental monitoring was conducted between 15 February to 15 March 2025 during the summer season. Ambient air quality was monitored at 8 locations and found to be within the NAAQS limits. PM₁₀ values ranged between ~71 g/m³ to ~90 g/m³, and air quality across all locations was assessed as "Satisfactory" as per CPCB's AQI. Noise monitoring at 11 locations revealed that levels in industrial, residential, and commercial zones were generally within prescribed limits, with a slight exceedance during night-time at the commercial site. Groundwater and surface water quality samples collected from 14 locations indicated that the physico-chemical parameters were within permissible limits for drinking water, with TDS values in groundwater ranging from 271 to 635 mg/l.

The Project Proponent has stated that the combined environment clearance for both proposed Cement Plant and the Mine, granted to M/s Sanghi Infrastructure M.P. Ltd. for mine lease area of 889.76ha on 26.03.2011 in favour of M/s Sanghi Infrastructure M.P. Ltd. The Environmental Clearance (EC) for the mine was officially transferred to M/s RCCPL Pvt. Ltd on 20.01.2025.

Project Proponent has submitted an application for amendment in EC, as per the additional conditions no. (ii) and (iii) of the EC transfer letter dated 20.01.2025:

Additional conditions no. (ii) This transfer of EC is subject to appropriate amendments in EC dated 03.05.2011 that PP should take as there are scope changes in the EC. The Project Proponent (PP) must obtain an amendment to the EC dated 03.05.2011 for the transportation route where the ore from the mining project will be transported.

Additional conditions no. (iii) All conditions stipulated in the EC letter No. J-12011/252/2009-IA.II dated 03.05.2011 shall remain unchanged and binding. Project Proponent shall seek amendment in the

EC from MoEFCC just after the transfer of EC in its name, for the conditions that has been redundant since Cement plant's validity has expired. Amendment in EC shall also be sought from MoEFCC for other scope and condition changes since the cement plant will not be established as envisaged.

The Project Proponent has sought the following amendments:

- a. The whole limestone production of 3 MTPA is proposed to be transported from the crusher to another existing Sadhera mine of proponent (RCCPL Private Ltd.), which is located at about 13.5 km from the mining lease.
- b. A reduced production capacity of 3 MTPA is requested.

Earlier, the Project Proponent had proposed to transport the mineral through a conveyor belt to the proposed cement plant located on adjacent land. However, the cement plant could not be established. Subsequently, the Project Proponent has proposed to transport the crushed limestone using tippers. The limestone will be transported by road over a distance of approximately 13.5 km from the project site to the Sadhera Limestone Mine.

The Project Proponent has also proposed to reduce the limestone production capacity from 5.64 million tonnes per annum (MTPA) to 3 MTPA. It has been submitted that this 47% reduction in production is expected to result in a corresponding decrease in pollution load.

The Committee advised the Project Proponent to carry out a fresh study to assess the environmental impact of road transportation over the proposed 13.5 km route. The earlier EIA-EMP report was based on the assumption that the mineral would be transported to the adjacent cement plant. However, the current proposal involves transportation by road through existing habitations. The Project Proponent is required to evaluate the potential impact of such transportation on the population residing in close proximity to the existing road.

The Committee also advised the Project Proponent (PP) to prepare a plan for constructing a conveyor belt from the mine site to the Sadhera Limestone Mine and to submit a detailed feasibility report in this regard.

Additionally, the Committee directed the PP to obtain a certificate from the State Directorate of Geology and Mining (DMG) confirming that no mining activity is being carried out along the common boundary of adjacent leases. The Committee further observed that the nearest school is located at a distance of approximately 140 meters from the mine pit, and that habitations exist within a 500-meter radius. In view of this, the Committee recommended the adoption of blast-less technology for mining operations adjacent to habitations.

The Committee also advised the Project Proponent to conduct wildlife sampling within the 10 km study area and submit a detailed report.

In light of the above observations, the Committee **deferred** the proposal and requested submission of the following information:

- i. A detailed feasibility report for the implementation of a conveyor belt system from the mine site to the Sadhera Limestone Mine.

- ii. A Scientific study assessing the environmental impact of road transportation on nearby habitations and other sensitive receptors such as schools and hospitals and surrounding environment including flora and fauna.
- iii. Details of the instruments proposed to be used for monitoring of atmospheric aerosol called particulate matter: PM, air and water pollution, along with calibration certificates issued by the National Physical Laboratory, New Delhi.
- iv. A comprehensive traffic study report, including the number of vehicles to be deployed, their tonnage, capacities and diesel consumption estimates.
- v. A detailed report on the hardness and compressive strength of the rock, to assess the feasibility of implementing blast-less mining technology and the use of surface miner near existing habitations.
- vi. PP needs to submit the compliance of the additional condition no. 7 of EC transfer letter dated 20.01.2025, "Regional office of the Ministry may conduct site inspection of the project soon after issuance of the transfer of EC and check the compliances of EC conditions. PP should submit the site inspection report of Regional office with next six monthly compliance report".
- vii. PP needs to obtain a certificate from the State Directorate of Geology and Mining (DMG) confirming that no mining activity is being carried out along the common boundary of adjacent leases.

3.2.5. Recommendation of EAC

Deferred for ADS

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Proposal for amendment of EC of Barsua-Taldih-Kalta Iron Mines (ML Area - 2558.581 ha) of SAIL-Rourkela Steel Plant by STEEL AUTHORITY OF INDIA LTD located at SUNDARGARH, ODISHA			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/523449/2025	J-11015/351/2006-IA.II(M)	03/04/2025	Mining of minerals (1(a))

3.3.2. Project Salient Features

The instant proposal is for Amendment in Environmental Clearance for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years and 3 years for Taldih and Kalta Mines respectively, to commence the operation of Belt Conveyor and to continue road transportation to Railway Sidings during extended period. The proposal includes amendment in the lease area from 2564.323 ha to 2558.581 ha. This change in ML area is attributed to the surrender of 5.742 ha of forest land, and a Supplementary Lease Deed for the revised area has been executed on 14.11.2024..

As per existing EC condition, Project Proponent shall commence the operation of the conveyor belt within 2 years from the date of issue of EC dated 28.04.2023. The EC condition specifically stated that SPCB shall grant CTO upto 12 MTPA only till the installation of conveyer belt i.e. 4 MTPA production from Barsua, 2 MTPA from Taldih, 4 MTPA from Kalta and 2 MTPA Subgrade/ Tailings.

2. The details of Project submitted by the Project Proponent are given as under:

1. Project details:

Name of the Proposal	Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years for Taldih Mines and 3 years for Kalta Mine to commence the operation of Belt Conveyor from these mines, and to continue road transportation from Taldih Mines and Kalta Mines to Barsua and Roxy Railway Sidings respectively during the extended period. The proposal also includes the incorporation of total mining lease area as 2558.581 ha.	
Location	Village	Tantra & Bahamba and Toda Reserve Forest
	Tehsil/Taluka	Koira
	District	Sundargarh
	State / UT	Odisha
	Latitudes	21°49'25.43880" N to 21°59'50.88516" N
	Longitudes	85°07'43.73832" E to 85°13'53.48136" E
	SoI Topo sheet No.	73G/1 (F45N1)
Company's Name	Barsua-Taldih-Kalta Iron Mines, Steel Authority of India Limited	

Accredited Consultant and certificate no.	MECON Limited, Ranchi has been engaged for baseline data generation and preparation of EIA-EMP report. Certificate No. NABET/EIA/24-27/RA 0342_Rev 01
KML file	Attached
Seismic zone	Seismic Zone II

2. Category details:

Category of the project	Category "A"
Provisions	Project Activity '1 (a)' & '2 (b)'
Mining lease Area (MLA) (in ha.)	2558.581 ha

3. EC Details: PP has obtained the Environmental Clearance vide letter no. F.No. J- 11015/351/2006-IA.II (M

4. Details of Mine Lease in Chronological manner:

ML detail	Date of the grant	Mine Lease Renewal Detail	
ML-130 lease (2486.383 ha)	1. Date of entering into Original lease deed: 06.01.1960. 2. Date of expiry of Original lease deed: 05.01.1990.	1. Date of 1 st lease renewal: 06.01.1990 2. Whether renewal or deemed renewal: Deemed renewal. 3. Date of expiry of 1 st lease renewal/deemed renewal: 05.01.2010.	1. Date of 2 nd lease renewal: 06.01.2010 2. Whether renewal or deemed renewal: Lease renewed and lease deed executed on 13.11.2014 3. Date of expiry of 2 nd lease renewal/deemed renewal: 05.01.2030
ML-162 lease	1. Date of entering into Original	1. Date of 1 st lease renewal: Applied	1. Date of 2 nd lease renewal:

(77.94 ha)	lease deed: 29.04.1960. 2. Date of expiry of Original lease deed: 28.04.1980.	2. Whether renewal or deemed renewal: Renewed by Govt. of Odisha. 3. Date of expiry of 1 st lease renewal: 28.04.2000.	21.04.1999 2. Whether renewal or deemed renewal: Lease extended up to 28.04.2030 and lease deed executed on 24.09.2016. 3. Date of expiry of 2 nd lease renewal/deemed renewal: 28.04.2030
Amalgamation of ML-130 & ML-162 lease (2564.323 ha)	The above two mining leases (ML-130 & ML-162) were contiguous. Based on the SAIL's application, Dept. of Steel and Mines, Govt. of Odisha vide proceeding No. IV (B) SM-03/2020/10418/SM, Bhubaneswar, Dt. 02.12.2020, amalgamated the contiguous Mining Leases viz. ML-130 and ML-162 covering total area of 2564.323 ha having <u>validity up to 05.01.2030</u> . Lease deed of the amalgamated lease has been executed on 30.03.2021 and valid upto 05.01.2030.		
Amendment Lease Deed for 2558.581 ha.	In compliance to Specific Condition no. ii of EC, after careful consideration of SAIL's application, surrender of part area of 5.742 ha (out of the Amalgamated Mining Lease area over an area of 2564.323 ha) was accepted by Government of Odisha vide order dated 16.10.2023 under Rule 21(1) of MCR 2016 and SAIL is allowed to retain the balance area under their possession till expiry of the validity of the lease. Accordingly, Amendment Lease Deed (ALD) was executed on 14.11.2024 for the reduced area i.e., 2558.581 ha.		

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

Private land	24.014 ha
Government land	114.696 ha
Total Mining lease area (MLA)	2558.581 ha
Private land for crusher, work	164.626 ha acquired area adjacent to Mining Lease area

shop & other infrastructure outside the MLA	at Barsua Valley and ~6.475 ha at Roxy Rly. Siding for installation of various allied facilities and infrastructure.
Additional information (if any)	Township outside the lease area: Tensa Township = 140.377 ha Barsua Valley Township = 53.29 ha Kalta Township = 31.10 ha

6. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	RMP 2317/2024-25/ IBM_R O_BBS
	Date	26.12.2024
	Mineral & Major/Minor	Iron Ore
	Mine Lease Area, Ha	2558.581 ha
	Validity	2025-26 to 2029-30
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Open Cast Mining	
Drilling/Blasting	Deep hole drilling of 110 and 150 mm diameter and blasting with ammonium nitrate and slurry explosives.	

Geological Reserves	693.31 Million Tonnes
Mineable Reserves	663.94 Million Tonnes
Breakup of Total Excavation (Top soil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	<p>Iron ore production – 16.0 MTPA (ROM)</p> <p>Topsoil/OB/IB – 4.0 MTPA</p> <p>Mineral Rejects – 2.0 MTPA (Sub-grade dumps/Tailings)</p> <p>Total Excavation – 22 MTPA</p>
Life of mine	40 years.
Mine Bench Height & Bench Width	10 m & 10 m / 6 m & 6 m
No. of Mine Benches	16
Existing Depth, m bgl	170 m
Ultimate Depth of Mining, m bgl	195 m
Ground Water Table, m bgl	<p>Barsua Block : 404 m - 408 m AMSL</p> <p>Taldih Block : 587 m - 593 m AMSL</p> <p>Kalta Block : 580 m - 586 m AMSL</p>
Details of ground water intersection	The mine working will not intersect ground water table.

Individual bench slope	80°
Overall pit slope	37°
Details of existing/ proposed Crusher	<p>A. Existing Crusher</p> <p>Primary Crushers:</p> <p>2 x 700 TPH, 6 x 300 TPH</p> <p>Secondary Crushers:</p> <p>2 x 450 TPH, 1 x 300 TPH, 2 x 250 TPH, 1 x 200 TPH</p> <p>B. Proposed Crusher</p> <p>Primary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH, 1 x 300 TPH</p> <p>Secondary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH</p> <p>Tertiary Crusher</p> <p>1 x 1800 TPH, 1 x 900 TPH</p>
Mineral Beneficiation	The operation of wet beneficiation in the ore processing plant of Barsua is being continuing. Other two mines, Taldih & Kalta are being operated in dry mode without beneficiation.
RoM output size	Iron Ore up to 40 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	<p>Existing:</p> <p>Barsua Mine: 4.0 MTPA by conveyor to Barsua Rly. Siding and final dispatch by rail.</p>

	<p>Taldih Mine: 2.0 MTPA by Road to Barsua Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 11 km and final dispatch by rail.</p> <p>Kalta Mine: 4.0 MTPA by road to Roxy Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 22 km and final dispatch by rail.</p> <p>Proposed:</p> <p>Taldih Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2027 and continuation of road transportation to Barsua Railway Siding till that time.</p> <p>Kalta Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2028 and continuation of road transportation to Roxy Railway Siding till that time.</p> <p>Barsua Mine: No Change in transportation mode.</p>
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>Top Soil: 59690.60 m³</p> <p>OB: 13279431.69 m³ during plan period.</p> <p>OB will be dumped in 5 nos. of waste dump.</p> <p>Part of OB will be used for backfilling in 2 areas at BIM & KIM.</p>
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	<p>Mineral Rejects: 10134573 Tonne</p> <p>Dispatch for direct sale in open market for selling or to SAIL steel plants for captive use directly or through beneficiation & pellet conversion agencies for converting the low-grade fines to pellets & supplying entire converted pellets to SAIL steel plants for captive use.</p>

7. Water requirement:

Total water requirement	8845 m3/day	Fresh water	7766 m3/day
		Treated water	1079 m3/day
Source	Kuradih Nalla for Barsua & Taldih Mines / Najkura Nalla for Kalta Mines		
Permission	<p>Department of Water Resources, Govt. of Odisha has permitted allocation of 3.406 cusec (~8333 m3/day) of surface water from Kuradih Nalla vide Letter no.4897/WR dated 15.02.2021. Renewal of Water agreement of Barsua & Taldih Mines for 3.406 cusec for the purpose of industrial and commercial use has been made with Water resource department on 06.01.2024 which is valid till 05.01.2027.</p> <p>In respect of Kalta Iron Mines, The permitted drawl quantity from Najkura Nalla is 24110 m3/month (~803 m3/day). Accordingly, Water Allocation order issued by Water Resource Department for 0.328 cusec on 14.08.2024. Subsequently, Water agreement for the purpose of industrial and commercial use has been made with Water resource department on 28.01.2025 which is valid till 27.01.2028.</p>		

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

Particulars	Particular's Name	Distance & Directions
Village	Tantra	Within Lease
Town	Koira	10 km
Highway	NH - 520	Passing through lease
Interstate Boundary	Odisha-Jharkhand Boundary	1.5 Km
Railway Station/Railway line	Barsua	1 Km
Water bodies	Samaj Nalla	Passing through lease

Forest	Toda RF	Within Lease
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9. 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	Out of 2558.581 ha amalgamated lease area, 2419.871 ha is Forest Land (Toda R.F.). Stage-II forest clearance for diversion of forest land over 2341.931 ha in ML – 130 was granted by MoEFCC vide F. No. 8-90/1996-FC (pt.), dated 06.03.2013. MoEFCC vide order no. F.No.8-18/2014-FC dated 23.10.2017 granted Stage-II FC for diversion of entire 77.94 ha of forestland under ML-162 for development of mining infrastructure.
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	PP submitted an authenticated map issued by the Office of the DFO, Bonai Division dated 06.04.2022. As per the authenticated map, there are no National Park/Wildlife Sanctuary/ Biosphere Reserved/Tiger Reserve/Eco Sensitive Zone within 10 km radius. However, Karo-Karampada Elephant Corridor is located at a distance of 3.2 km
Schedule-I species (Nos. and name of Schedule-I species with authenticated letter)	Yes	Core Zone: None, Buffer Zone: Indian Elephant, Sloth Bear, Wolf, Sloth Bear
Wildlife Conservation Plan		Two Site Specific Wildlife Conservation Plans (SSWCP) were approved by Chief Wildlife Warden, Odisha vide dated 25.02.2013 for 2486.313 ha & 13.01.2016 for 77.94 ha.

		An amount of Rs.17.82 Crores & Rs. 9.84 Crores were deposited for implementation of approved SSWCPs in Buffer Zone of Barsua-Taldih-Kalta Iron Mines.
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10. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	1548.726 ha at the end of mining / 24, 52,596 saplings
Budget for green plant & plantation till the end of life of mine.	Rs. 73,58,00,000/-
Budget for nursery	
Details of existing plantation and its survival rate	127.42 ha / 80 %
No. of tree cuts in the mine lease area and compensatory afforestation	
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	93.679 ha
50 m safety zone of Nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	

11. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	Oct.- Nov.-Dec. 2024
Season (Summer / Pre-monsoon /	Post Monsoon, 2024

Post-monsoon / Winter)	
Predominant Wind direction (From)	Overall - North followed by North-East [Source: IMD, Keonjhar]
Ambient Air Quality (no. of locations) and results	No. of locations: 6; Results: Air quality values are well within the norms.
Noise level (no. of locations) and results	No. of locations: 7; Results: Mean noise levels at all locations are well within the respective norms of the type of area.
Water Quality (no. of locations) and results	No. of locations: 9 [Surface Water - 6; Ground Water – 3]; Results: Surface Water can be classified as Class ‘B’ type [CPCB’s Water Quality Criteria] Ground water quality at all locations are within IS: 10500, (2012) limits
Soil Quality (no. of locations) and results	No. of locations: 2; Results: Soil samples are capable of retaining moisture, soil fertility is also good.
Traffic study (no. of locations) and results	No. of locations: 4; Results: Existing traffic load varies from 40% - 47% of existing road capacity. Level of Service – B & C.
12. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the	

Particulars	Details of Letter along with date of grant and validity																																				
Consent to Establish	PP has obtained the CTE vide Letter No.: 9222/IND-II-CTE-69 10, Date: 07.06.2023																																				
Consent to Operate	PP has obtained the CTO Letter No. 6964/IND-I-CON-1(A), D ate: 31.03.2025, valid up to 31.03.2026																																				
Certified Compliance Report and Inspection date	<p>Certified EC compliance report has been issued by MoEFCC R egional Office, Bhubaneswar on 05.03.2025 and SAIL had sub mitted Action Taken Report (ATR) on 10.03.2025 against the o bservation given in CCR.</p> <p>Based on the SAIL’s ATR, MoEFCC Regional Office, Bhuban eswar has reviewed the compliances by doing Site inspection a nd issued comments on ATR submitted by M/s SAIL on 02.04. 2025.</p> <p>Inspection date: 24.01.2025 and 25.01.2025</p> <p>Re-Inspection date: 26.03.2025 and 27.03.2025</p>																																				
Certified Production Details from the incep tion of the mine (in ta bular form against the EC capacity)	<p>Memo No. 6522/Mines, dated 13.12.2019, Memo No. 4004/Mi nes, dated 22.10.2021 & Memo No. 2599/Mines, dated 13.09.2 022 issued by Dy. Director of Mines, Koira Mining Circle, Koi ra</p> <table><tr><th>Year</th><th>EC sanctioned Capacity (in tonnes/ year)</th><th>Actual production (in tonnes/ year)</th></tr><tr><td>2011-12</td><td>80,50,000</td><td>26,87,921</td></tr><tr><td>2012-13</td><td>80,50,000</td><td>30,10,890</td></tr><tr><td>2013-14</td><td>80,50,000</td><td>28,64,831</td></tr><tr><td>2014-15</td><td>80,50,000</td><td>15,45,987</td></tr><tr><td>2015-16</td><td>80,50,000</td><td>12,67,840</td></tr><tr><td>2016-17</td><td>80,50,000</td><td>14,58,340</td></tr><tr><td>2017-18</td><td>80,50,000</td><td>21,33,560</td></tr><tr><td>2018-19</td><td>80,50,000</td><td>38,45,242</td></tr><tr><td>2019-20</td><td>80,50,000</td><td>46,99,847</td></tr><tr><td>2020-21</td><td>80,50,000</td><td>58,74,431</td></tr><tr><td>2021-22</td><td>80,50,000</td><td>69,74,691</td></tr></table>	Year	EC sanctioned Capacity (in tonnes/ year)	Actual production (in tonnes/ year)	2011-12	80,50,000	26,87,921	2012-13	80,50,000	30,10,890	2013-14	80,50,000	28,64,831	2014-15	80,50,000	15,45,987	2015-16	80,50,000	12,67,840	2016-17	80,50,000	14,58,340	2017-18	80,50,000	21,33,560	2018-19	80,50,000	38,45,242	2019-20	80,50,000	46,99,847	2020-21	80,50,000	58,74,431	2021-22	80,50,000	69,74,691
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	2022-23	80,50,000	68,26,932
	2023-24	1,60,00,000	69,80,529

13. Rehabilitation & Resettlement:

R & R details	Not Applicable as no private land acquired for the project nor there is any proposal to do so
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14. Court case details:

Court Case, No and its present status	<p>WP(C) No. 24282/2017</p> <p>Subsequent to the judgment of Apex Court dated 02.08.2017, the Government of Odisha has issued demand notices to Barsua-Kalta Mines for payment of compensation towards excess production on or before 31st December 2017 against EC / CTO capacity. Dy. Director of Mines (DDM), Koira vide letter dated 02.09.2017 issued a demand notice for payment of Rs. 66,89,42,779.50/- in respect of Barsua/ Kalta Iron Mines to recover price of mineral produced without / beyond EC alone under Section 21 (5) of MMDR Act, 1957. The said amount was deposited on 29.12.2017 under protest. Further, letter No.5962/Mines dtd 24.10.2017 of DDM, Koira has directed to pay compensation of Rs.90,19,71,684.40/- for mining more than the permissible limit under the Consent to Operate. Against the above stated demands, SAIL had filed a Writ Petition bearing WP (C) No-24282/2017 in High Court of Odisha, Cuttack. The matter was heard, and Hon'ble High Court had passed the stay order on 04.04.2018 & matter is sub-judice.</p>
Undertaking by Project Proponent w.r.t court case	PP has submitted an Affidavit vide letter dated 06.02.2025.

15. Affidavit/ Undertaking details:

Affidavit/ Undertaking	PP has submitted an Affidavit vide letter dated 06.02.2025.
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16. Project Proponent has submitted the point-wise reply against the EDS raised on 21.02.2025 vide letter dated

S. No.	Observation of MoEF	Reply by PP
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I.	<p>It has been noted that Regional office Bhubaneswar has done the site inspection of the project recently. PP should submit the site inspection / monitoring report of the Regional office w.r.to the compliance of EC conditions.</p>	<p>The Site Inspection of Barsua, Taldih & Kalta Iron Mines done by the Regional Office, MOEFCC, Bhubaneswar during 24th & 25th January, 2025 for reviewing & progress of jobs on the existing EC conditions. The Certified EC compliance report / Site Inspection / Monitoring Report have been issued on 05.03.2025. Subsequently, SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in CCR. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing Site inspection and issued comments on ATR submitted by M/s SAIL on 02.04.2025.</p>
II.	<p>PP should also submit the compliance of NEERI condition with regard to Suggested Ore Transport Mode (SOTM).</p>	<p>Amalgamated Barsua-Taldih-Kalta Iron Mining Lease (erstwhile ML -130 & ML-162 leases) spread over an area of 2558.581 ha comprises of three mines with their own quarries, mineral processing plants, mineral despatch facilities and other infrastructure.</p> <p>Mode of material transportation: -</p> <ul style="list-style-type: none"> · Entire ore from the Barsua is being transported by downhill conveyors from mines to SAIL's Pvt. Barsua Railway Siding. · In case of Taldih, the processed ore being transported by trucks to Barsua Railway Siding which is 11 km haulage of public road. · In case of Kalta the entire production is sent by trucks Roxy Rly. Siding. The haulage comprises. · ~4.0 km of internal roads and ~18 km of public roads (NH-520 which is a 4-lane road with a divider). <p>In compliance to the recommendation of NEERI on Suggested Ore Transport Mode (SOTM), evacuation of entire ore from Taldih & Kalta Mines through long distance belt conveyors (LDBC) to Railway Sidings at Barsua and Roxy respectively is envisaged under the 16 MTPA expansions of the mines. However, during the construction phase, Taldih Iron Mine shall continue to transport 2.0 MTPA of iron ore through existing transport road to Barsua Rai</p>

		<p>lway Siding and Kalta Iron Mines shall continue to transport 4.0 MTPA iron ore through existing transport road to Roxy Siding.</p> <p>The Iron Ore from Barsua Iron Mines is transported through Belt conveyor since beginning of the Mines. PP has submitted detail status report and action plan for installation of Long-Distance Belt Conveyor at Taldih and Kalta Iron Mine.</p>
III.	<p>PP should submit a brief write-up and supporting geotagged photographs regarding the steps taken so that there is no spillage of mineral/ore during ore transportation through road.</p>	<p>The following regular steps are being taken at Barsua-Taldih-Kalta Iron Mines during transportation of iron ore to prevent spillage during transportation:</p> <ol style="list-style-type: none"> 1. Checking of dumpers at security gate for any damaged body. 2. Covering of bottom of the dumper with tarpaulin. 3. Loading of dumpers with appropriate size of backhoe. 4. Load Adjustment with the help of Weigh Bridge. 5. Ore carrying dumpers are covered with tarpaulin sheets. <p>PP has submitted Geotagged recent photographs (with date, time & location stamps) of the above measures in operation</p>
IV.	<p>PP should submit copy of record of training details imparted to operators, supervisors, workers regarding steps to be followed to ensure that there is no spillage of mineral/ore during ore transportation through road.</p>	<p>PP has submitted a copy of record of training details imparted to drivers, operators, and supervisors.</p>

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Pollution Control		
A. Water Pollution Control	16.00	190.00
B. Air Pollution Control	20.95	491.00
C. Solid Waste Management	0.55	40.00
Occupational Safety & Health	0.30	15.00
Green Belt development	73.58	0.00
Wildlife conservation & management	0.00	142.00
Pollution Monitoring	0.00	40.00
Rainwater Harvesting	0.50	5.00
Cost for Environmental Protection Measures (in Rs. Lakhs)	111.88	923.00

18. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of public hearing)	Rs. 133.76 Crores
Project Cost	Rs. 2740.88 Crores
Employment (Nos.)	1133

The instant proposal is for Amendment in Environmental Clearance for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years and 3 years for Taldih and Kalta Mines respectively, to commence the operation of Belt Conveyor and to continue road transportation to Railway Sidings during extended period. The proposal includes amendment in the lease area from 2564.323 ha to 2558.581 ha. This change in ML area is attributed to the surrender of 5.742 ha of forest land, and a Supplementary Lease Deed for the revised area has been executed on 14.11.2024..

As per existing EC condition, Project Proponent shall commence the operation of the conveyor belt within 2 years from the date of issue of EC dated 28.04.2023. The EC condition specifically stated

that SPCB shall grant CTO upto 12 MTPA only till the installation of conveyer belt i.e. 4 MTPA production from Barsua, 2 MTPA from Taldih, 4 MTPA from Kalta and 2 MTPA Subgrade/ Tailings.

2. The details of Project submitted by the Project Proponent are given as under:

1. Project details:

Name of the Proposal	Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years for Taldih Mines and 3 years for Kalta Mine to commence the operation of Belt Conveyor from these mines, and to continue road transportation from Taldih Mines and Kalta Mines to Barsua and Roxy Railway Sidings respectively during the extended period. The proposal also includes the incorporation of total mining lease area as 2558.581 ha.	
Location	Village	Tantra & Bahamba and Toda Reserve Forest
	Tehsil/Taluka	Koira
	District	Sundargarh
	State / UT	Odisha
	Latitudes	21°49'25.43880" N to 21°59'50.88516" N
	Longitudes	85°07'43.73832" E to 85°13'53.48136" E
	SoI Topo sheet No.	73G/1 (F45N1)
Company's Name	Barsua-Taldih-Kalta Iron Mines, Steel Authority of India Limited	
Accredited Consultant	MECON Limited, Ranchi has been engaged for baseline data g	

and certificate no.	eneration and preparation of EIA-EMP report. Certificate No. NABET/EIA/24-27/RA 0342_Rev 01
KML file	Attached
Seismic zone	Seismic Zone II

2. Category details:

Category of the project	Category “A”
Provisions	Project Activity ‘1 (a)’ & ‘2 (b)’
Mining lease Area (MLA) (in ha.)	2558.581 ha

3. EC Details: PP has obtained the Environmental Clearance vide letter no. F.No. J- 11015/351/2006-IA.II (M

4. Details of Mine Lease in Chronological manner:

ML detail	Date of the grant	Mine Lease Renewal Detail	
ML-130 lease (2486.383 ha)	1. Date of entering into Original lease deed: 06.01.1960. 2. Date of expiry of Original lease deed: 05.01.1990.	1. Date of 1 st lease renewal: 06.01.1990 2. Whether renewal or deemed renewal: Deemed renewal. 3. Date of expiry of 1 st lease renewal/deemed renewal: 05.01.2010.	1. Date of 2 nd lease renewal: 06.01.2010 2. Whether renewal or deemed renewal: Lease renewed and lease deed executed on 13.11.2014 3. Date of expiry of 2 nd lease renewal/deemed renewal: 05.01.2030
ML-162 lease (77.94 ha)	1. Date of entering into Original lease deed: 29.0	1. Date of 1 st lease renewal: Applied	1. Date of 2 nd lease renewal:

	<p>4.1960.</p> <p>2. Date of expiry of</p> <p>Original lease deed: 28.04.1980.</p>	<p>2. Whether renewal or deemed renewal:</p> <p>Renewed by Govt. of Odisha.</p> <p>3. Date of expiry of 1st lease renewal: 28.04.2000.</p>	<p>21.04.1999</p> <p>2. Whether renewal or deemed renewal:</p> <p>Lease extended up to 28.04.2030 and lease deed executed on 24.09.2016.</p> <p>3. Date of expiry of 2nd lease renewal/deemed renewal: 28.04.2030</p>
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Private land	24.014 ha
Government land	114.696 ha
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Private land for crusher, work	164.626 ha acquired area adjacent to Mining Lease area

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Additional information (if any)	Township outside the lease area: Tensa Township = 140.377 ha Barsua Valley Township = 53.29 ha Kalta Township = 31.10 ha

6. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	RMP 2317/2024-25/ IBM_R O_BBS
	Date	26.12.2024
	Mineral & Major/Minor	Iron Ore
	Mine Lease Area, Ha	2558.581 ha
	Validity	2025-26 to 2029-30
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Open Cast Mining	
Drilling/Blasting	Deep hole drilling of 110 and 150 mm diameter and blasting with ammonium nitrate and slurry explosives.	

Geological Reserves	693.31 Million Tonnes
Mineable Reserves	663.94 Million Tonnes
Breakup of Total Excavation (Top soil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	<p>Iron ore production – 16.0 MTPA (ROM)</p> <p>Topsoil/OB/IB – 4.0 MTPA</p> <p>Mineral Rejects – 2.0 MTPA (Sub-grade dumps/Tailings)</p> <p>Total Excavation – 22 MTPA</p>
Life of mine	40 years.
Mine Bench Height & Bench Width	10 m & 10 m / 6 m & 6 m
No. of Mine Benches	16
Existing Depth, m bgl	170 m
Ultimate Depth of Mining, m bgl	195 m
Ground Water Table, m bgl	<p>Barsua Block : 404 m - 408 m AMSL</p> <p>Taldih Block : 587 m - 593 m AMSL</p> <p>Kalta Block : 580 m - 586 m AMSL</p>
Details of ground water intersection	The mine working will not intersect ground water table.

Individual bench slope	80°
Overall pit slope	37°
Details of existing/ proposed Crusher	<p>A. Existing Crusher</p> <p>Primary Crushers:</p> <p>2 x 700 TPH, 6 x 300 TPH</p> <p>Secondary Crushers:</p> <p>2 x 450 TPH, 1 x 300 TPH, 2 x 250 TPH, 1 x 200 TPH</p> <p>B. Proposed Crusher</p> <p>Primary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH, 1 x 300 TPH</p> <p>Secondary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH</p> <p>Tertiary Crusher</p> <p>1 x 1800 TPH, 1 x 900 TPH</p>
Mineral Beneficiation	The operation of wet beneficiation in the ore processing plant of Barsua is being continuing. Other two mines, Taldih & Kalta are being operated in dry mode without beneficiation.
RoM output size	Iron Ore up to 40 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	<p>Existing:</p> <p>Barsua Mine: 4.0 MTPA by conveyor to Barsua Rly. Siding and final dispatch by rail.</p>

	<p>Taldih Mine: 2.0 MTPA by Road to Barsua Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 11 km and final dispatch by rail.</p> <p>Kalta Mine: 4.0 MTPA by road to Roxy Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 22 km and final dispatch by rail.</p> <p>Proposed:</p> <p>Taldih Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2027 and continuation of road transportation to Barsua Railway Siding till that time.</p> <p>Kalta Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2028 and continuation of road transportation to Roxy Railway Siding till that time.</p> <p>Barsua Mine: No Change in transportation mode.</p>
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>Top Soil: 59690.60 m³</p> <p>OB: 13279431.69 m³ during plan period.</p> <p>OB will be dumped in 5 nos. of waste dump.</p> <p>Part of OB will be used for backfilling in 2 areas at BIM & KIM.</p>
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	<p>Mineral Rejects: 10134573 Tonne</p> <p>Dispatch for direct sale in open market for selling or to SAIL steel plants for captive use directly or through beneficiation & pellet conversion agencies for converting the low-grade fines to pellets & supplying entire converted pellets to SAIL steel plants for captive use.</p>

7. Water requirement:

Total water requirement	8845 m3/day	Fresh water	7766 m3/day
		Treated water	1079 m3/day
Source	Kuradih Nalla for Barsua & Taldih Mines / Najkura Nalla for Kalta Mines		
Permission	<p>Department of Water Resources, Govt. of Odisha has permitted allocation of 3.406 cusec (~8333 m3/day) of surface water from Kuradih Nalla vide Letter no.4897/WR dated 15.02.2021. Renewal of Water agreement of Barsua & Taldih Mines for 3.406 cusec for the purpose of industrial and commercial use has been made with Water resource department on 06.01.2024 which is valid till 05.01.2027.</p> <p>In respect of Kalta Iron Mines, The permitted drawl quantity from Najkura Nalla is 24110 m3/month (~803 m3/day). Accordingly, Water Allocation order issued by Water Resource Department for 0.328 cusec on 14.08.2024. Subsequently, Water agreement for the purpose of industrial and commercial use has been made with Water resource department on 28.01.2025 which is valid till 27.01.2028.</p>		

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

Particulars	Particular's Name	Distance & Directions
Village	Tantra	Within Lease
Town	Koira	10 km
Highway	NH - 520	Passing through lease
Interstate Boundary	Odisha-Jharkhand Boundary	1.5 Km
Railway Station/Railway line	Barsua	1 Km
Water bodies	Samaj Nalla	Passing through lease

Forest	Toda RF	Within Lease
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9. 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	Out of 2558.581 ha amalgamated lease area, 2419.871 ha is Forest Land (Toda R.F.). Stage-II forest clearance for diversion of forest land over 2341.931 ha in ML – 130 was granted by MoEFCC vide F. No. 8-90/1996-FC (pt.), dated 06.03.2013. MoEFCC vide order no. F.No.8-18/2014-FC dated 23.10.2017 granted Stage-II FC for diversion of entire 77.94 ha of forestland under ML-162 for development of mining infrastructure.
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	PP submitted an authenticated map issued by the Office of the DFO, Bonai Division dated 06.04.2022. As per the authenticated map, there are no National Park/Wildlife Sanctuary/ Biosphere Reserved/TigerReserve/Eco Sensitive Zone within 10 km radius. However, Karo-Karampada Elephant Corridor is located at a distance of 3.2 km
Schedule-I species (Nos. and name of Schedule-I species with authenticated letter)	Yes	Core Zone: None, Buffer Zone: Indian Elephant, Sloth Bear, Wolf, Sloth Bear
Wildlife Conservation Plan		Two Site Specific Wildlife Conservation Plans (SSWCP) were approved by Chief Wildlife Warden, Odisha vide dated 25.02.2013 for 2486.313 ha & 13.01.2016 for 77.94 ha.

		An amount of Rs.17.82 Crores & Rs. 9.84 Crores were deposited for implementation of approved SSWCPs in Buffer Zone of Barsua-Taldih-Kalta Iron Mines.
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10. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	1548.726 ha at the end of mining / 24, 52,596 saplings
Budget for green plant & plantation till the end of life of mine.	Rs. 73,58,00,000/-
Budget for nursery	
Details of existing plantation and its survival rate	127.42 ha / 80 %
No. of tree cuts in the mine lease area and compensatory afforestation	
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	93.679 ha
50 m safety zone of Nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	

11. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	Oct.- Nov.-Dec. 2024
Season (Summer / Pre-monsoon /	Post Monsoon, 2024

Post-monsoon / Winter)	
Predominant Wind direction (From)	Overall - North followed by North-East [Source: IMD, Keonjhar]
Ambient Air Quality (no. of locations) and results	No. of locations: 6; Results: Air quality values are well within the norms.
Noise level (no. of locations) and results	No. of locations: 7; Results: Mean noise levels at all locations are well within the respective norms of the type of area.
Water Quality (no. of locations) and results	No. of locations: 9 [Surface Water - 6; Ground Water – 3]; Results: Surface Water can be classified as Class ‘B’ type [CPCB’s Water Quality Criteria] Ground water quality at all locations are within IS: 10500, (2012) limits
Soil Quality (no. of locations) and results	No. of locations: 2; Results: Soil samples are capable of retaining moisture, soil fertility is also good.
Traffic study (no. of locations) and results	No. of locations: 4; Results: Existing traffic load varies from 40% - 47% of existing road capacity. Level of Service – B & C.

12. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the

Particulars	Details of Letter along with date of grant and validity																																				
Consent to Establish	PP has obtained the CTE vide Letter No.: 9222/IND-II-CTE-69 10, Date: 07.06.2023																																				
Consent to Operate	PP has obtained the CTO Letter No. 6964/IND-I-CON-1(A), D ate: 31.03.2025, valid up to 31.03.2026																																				
Certified Compliance Report and Inspection date	<p>Certified EC compliance report has been issued by MoEFCC R egional Office, Bhubaneswar on 05.03.2025 and SAIL had sub mitted Action Taken Report (ATR) on 10.03.2025 against the o bservation given in CCR.</p> <p>Based on the SAIL’s ATR, MoEFCC Regional Office, Bhuban eswar has reviewed the compliances by doing Site inspection a nd issued comments on ATR submitted by M/s SAIL on 02.04. 2025.</p> <p>Inspection date: 24.01.2025 and 25.01.2025</p> <p>Re-Inspection date: 26.03.2025 and 27.03.2025</p>																																				
Certified Production Details from the incep tion of the mine (in ta bular form against the EC capacity)	<p>Memo No. 6522/Mines, dated 13.12.2019, Memo No. 4004/Mi nes, dated 22.10.2021 & Memo No. 2599/Mines, dated 13.09.2 022 issued by Dy. Director of Mines, Koira Mining Circle, Koi ra</p> <table><tr><th>Year</th><th>EC sanctioned Capacity (in tonnes/ year)</th><th>Actual production (in tonnes/ year)</th></tr><tr><td>2011-12</td><td>80,50,000</td><td>26,87,921</td></tr><tr><td>2012-13</td><td>80,50,000</td><td>30,10,890</td></tr><tr><td>2013-14</td><td>80,50,000</td><td>28,64,831</td></tr><tr><td>2014-15</td><td>80,50,000</td><td>15,45,987</td></tr><tr><td>2015-16</td><td>80,50,000</td><td>12,67,840</td></tr><tr><td>2016-17</td><td>80,50,000</td><td>14,58,340</td></tr><tr><td>2017-18</td><td>80,50,000</td><td>21,33,560</td></tr><tr><td>2018-19</td><td>80,50,000</td><td>38,45,242</td></tr><tr><td>2019-20</td><td>80,50,000</td><td>46,99,847</td></tr><tr><td>2020-21</td><td>80,50,000</td><td>58,74,431</td></tr><tr><td>2021-22</td><td>80,50,000</td><td>69,74,691</td></tr></table>	Year	EC sanctioned Capacity (in tonnes/ year)	Actual production (in tonnes/ year)	2011-12	80,50,000	26,87,921	2012-13	80,50,000	30,10,890	2013-14	80,50,000	28,64,831	2014-15	80,50,000	15,45,987	2015-16	80,50,000	12,67,840	2016-17	80,50,000	14,58,340	2017-18	80,50,000	21,33,560	2018-19	80,50,000	38,45,242	2019-20	80,50,000	46,99,847	2020-21	80,50,000	58,74,431	2021-22	80,50,000	69,74,691
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	2022-23	80,50,000	68,26,932
	2023-24	1,60,00,000	69,80,529

13. Rehabilitation & Resettlement:

R & R details	Not Applicable as no private land acquired for the project nor there is any proposal to do so
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14. Court case details:

Court Case, No and its present status	<p>WP(C) No. 24282/2017</p> <p>Subsequent to the judgment of Apex Court dated 02.08.2017, the Governments of Odisha has issued demand notices to Barsua-Kalta Mines for payment of compensation towards excess production on or before 31st December 2017 against EC / CTO capacity. Dy. Director of Mines (DDM), Koira vide letter dated 02.09.2017 issued a demand notice for payment of Rs. 66,89,42,779.50/- in respect of Barsua/ Kalta Iron Mines to recover price of mineral produced without / beyond EC alone under Section 21 (5) of MMDR Act, 1957. The said amount was deposited on 29.12.2017 under protest. Further, letter No.5962/Mines dtd 24.10.2017 of DDM, Koira has directed to pay compensation of Rs.90,19,71,684.40/- for mining more than the permissible limit under the Consent to Operate. Against the above stated demands, SAIL had filed a Writ Petition bearing WP (C) No-24282/2017 in High Court of Odisha, Cuttack. The matter was heard, and Hon'ble High Court had passed the stay order on 04.04.2018 & matter is sub-judice.</p>
Undertaking by Project Proponent w.r.t court case	PP has submitted an Affidavit vide letter dated 06.02.2025.

15. Affidavit/ Undertaking details:

Affidavit/ Undertaking	PP has submitted an Affidavit vide letter dated 06.02.2025.
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16. Project Proponent has submitted the point-wise reply against the EDS raised on 21.02.2025 vide letter dated

S. No.	Observation of MoEF	Reply by PP
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I.	<p>It has been noted that Regional office Bhubaneswar has done the site inspection of the project recently. PP should submit the site inspection / monitoring report of the Regional office w.r.to the compliance of EC conditions.</p>	<p>The Site Inspection of Barsua, Taldih & Kalta Iron Mines done by the Regional Office, MOEFCC, Bhubaneswar during 24th & 25th January, 2025 for reviewing & progress of jobs on the existing EC conditions. The Certified EC compliance report / Site Inspection / Monitoring Report have been issued on 05.03.2025. Subsequently, SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in CCR. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing Site inspection and issued comments on ATR submitted by M/s SAIL on 02.04.2025.</p>
II.	<p>PP should also submit the compliance of NEERI condition with regard to Suggested Ore Transport Mode (SOTM).</p>	<p>Amalgamated Barsua-Taldih-Kalta Iron Mining Lease (erstwhile ML -130 & ML-162 leases) spread over an area of 2558.581 ha comprises of three mines with their own quarries, mineral processing plants, mineral despatch facilities and other infrastructure.</p> <p>Mode of material transportation: -</p> <ul style="list-style-type: none"> · Entire ore from the Barsua is being transported by downhill conveyors from mines to SAIL's Pvt. Barsua Railway Siding. · In case of Taldih, the processed ore being transported by trucks to Barsua Railway Siding which is 11 km haulage of public road. · In case of Kalta the entire production is sent by trucks Roxy Rly. Siding. The haulage comprises. · ~4.0 km of internal roads and ~18 km of public roads (NH-520 which is a 4-lane road with a divider). <p>In compliance to the recommendation of NEERI on Suggested Ore Transport Mode (SOTM), evacuation of entire ore from Taldih & Kalta Mines through long distance belt conveyors (LDBC) to Railway Sidings at Barsua and Roxy respectively is envisaged under the 16 MTPA expansions of the mines. However, during the construction phase, Taldih Iron Mine shall continue to transport 2.0 MTPA of iron ore through existing transport road to Barsua Rai</p>

		<p>lway Siding and Kalta Iron Mines shall continue to transport 4.0 MTPA iron ore through existing transport road to Roxy Siding.</p> <p>The Iron Ore from Barsua Iron Mines is transported through Belt conveyor since beginning of the Mines. PP has submitted detail status report and action plan for installation of Long-Distance Belt Conveyor at Taldih and Kalta Iron Mine.</p>
III.	<p>PP should submit a brief write-up and supporting geotagged photographs regarding the steps taken so that there is no spillage of mineral/ore during ore transportation through road.</p>	<p>The following regular steps are being taken at Barsua-Taldih-Kalta Iron Mines during transportation of iron ore to prevent spillage during transportation:</p> <ol style="list-style-type: none"> 1. Checking of dumpers at security gate for any damaged body. 2. Covering of bottom of the dumper with tarpaulin. 3. Loading of dumpers with appropriate size of backhoe. 4. Load Adjustment with the help of Weigh Bridge. 5. Ore carrying dumpers are covered with tarpaulin sheets. <p>PP has submitted Geotagged recent photographs (with date, time & location stamps) of the above measures in operation</p>
IV.	<p>PP should submit copy of record of training details imparted to operators, supervisors, workers regarding steps to be followed to ensure that there is no spillage of mineral/ore during ore transportation through road.</p>	<p>PP has submitted a copy of record of training details imparted to drivers, operators, and supervisors.</p>

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Pollution Control		
A. Water Pollution Control	16.00	190.00
B. Air Pollution Control	20.95	491.00
C. Solid Waste Management	0.55	40.00
Occupational Safety & Health	0.30	15.00
Green Belt development	73.58	0.00
Wildlife conservation & management	0.00	142.00
Pollution Monitoring	0.00	40.00
Rainwater Harvesting	0.50	5.00
Cost for Environmental Protection Measures (in Rs. Lakhs)	111.88	923.00

18. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of public hearing)	Rs. 133.76 Crores
Project Cost	Rs. 2740.88 Crores
Employment (Nos.)	1133

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

The Committee deliberated the proposal for Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines, which seeks a time extension of 2 years for Taldih

Mines and 3 years for Kalta Mine to commence the operation of Belt Conveyor from these mines, and to continue road transportation from Taldih Mines and Kalta Mines to Barsua and Roxy Railway Sidings respectively during the extended period. The proposal includes amendment in the lease area from 2564.323 ha to 2558.581 ha. This change in ML area is attributed to the surrender of 5.742 ha of forestland, and a Supplementary Lease Deed for the revised area has been executed on 14.11.2024.

The Project Proponent and the Consultant presented the key site features through a KML file. PP informed that the total mining lease area has been revised from 2564.323 hectares, as mentioned in the existing Environmental Clearance (EC), to 2558.581 hectares in the present proposal. This reduction of 5.742 hectares is due to the surrender of forest land, and a Supplementary Lease Deed reflecting the revised area.

The Committee also observed that, as per the conditions stipulated in the existing EC dated 28.04.2023, the Project Proponent is required to commence the operation of the conveyor belt within two years from the date of EC issuance. Until the conveyor belt becomes operational, the State Pollution Control Board (SPCB) shall only grant Consent to Operate (CTO) for a capacity of up to 12 MTPA, comprising 4 MTPA from Barsua, 2 MTPA from Taldih, 4 MTPA from Kalta and 2 MTPA from Subgrade/Tailings. Accordingly, EAC asked the reasons for delay in installation of the conveyor belt. PP replied that there had been delays in finalizing the Mine Development Operator for both Taldih and Kalta mines.

PP added that they have issued a Letter of Award (LOA) on 27.09.2024 for the Taldih mine, and the Mine Service Agreement was executed on 20.11.2024. As informed, the development of the mine and installation of the conveyor belt are expected to take approximately two years. Accordingly, the Project Proponent has requested an extension of two years for commencement of the conveyor belt upto Barsua Railway siding. PP has also requested to permit transportation through road upto Barsua Railway siding till the commencement of the conveyor belt.

Further, in respect of Kalta Iron Mine, PP requested the Committee to provide a three-year extension for commencement of conveyor belt upto Roxy Railway Siding and to allow road transportation till then. EAC noted the submission of PP and enquired about seeking a three year time period whereas for Taldih mine PP is seeking two years.

PP submitted that conveyor belt from Kalta mine to Roxy Railway siding would require various statutory clearances including Forest Clearance and finalization of MDO. As of now, the route outside mining lease area upto Roxy Railway siding, along with the Feasibility Report has been finalized. The proposal is currently under evaluation for approval by the SAIL Board. EAC noted the submissions of PP and directed that PP should complete the installation and commencement of conveyor belt as committed above for both Taldih and Kalta mines. EAC also advised PP to take necessary precautions while undertaking transportation through road upto the above mentioned railway sidings to prevent pilferage of mineral and air pollution.

The Site Inspection of Barsua, Taldih & Kalta Iron Mines was done by the Regional Office, MOEFCC, Bhubaneswar during 24th & 25th January, 2025 for reviewing & progress of jobs on the

existing EC conditions. The Site Inspection / Monitoring Report have been issued on 05.03.2025 by RO Bhubaneswar. Subsequently, SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in site inspection/monitoring report. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing another site inspection and issued comments (on ATR submitted by M/s SAIL) on 02.04.2025. Committee observed that as per the RO Bhubaneswar report dated 02.04.2025, PP has complied or assured to comply most of the conditions - as per the report majority of the conditions are being complied and/or assured to comply. EAC advised the PP to comply all the EC conditions within stipulated time as per the RO Report dated 02.04.2025 and PP's commitments. EAC specifically instructed PP to comply the conditions related to STP installation, installation of remaining fixed water sprinkling system, installation of remaining one CAAQMS and one manual AAQMS. ,within stipulated/ committed time period.

Based on the above discussions and presentation made by the Project Proponent and the Consultant, the EAC in its 43rd EAC meeting held during 22-23 April 2024 **recommended** the proposal of Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines located in Koira Tehsil, Sundargarh District, Odisha under EIA notification 2006 (as amended) and permitted the transportation by road from Taldih mines to Barsua Railway siding for a period of two years upto 26.04.2027 and from Kalta Mines to Roxy Railway Siding for a period of 3years upto 26.04.2028 along with reduction in lease area from 2564.323 ha to 2558.581 ha in favour of M/s SAIL subject to the following additional specific conditions:-

3.3.5. Recommendation of EAC

Recommended

3.3.6. Details of Environment Conditions

3.3.6.1. Specific

Specific Conditions	
1.	The specific condition (iv) of EC letter dated 28.04.2023 shall now be read as "The Project Proponent shall commence the operation of the conveyer belt from Taldih mine to Barusa Railway siding by 26.04.2027 and from Kalta mines to Roxy Railway siding by 26.04.2028. SPCB shall grant CTO upto 12 MTPA only (consisting of 4 MTPA from Barsua, 2MTPA from Taldih and 4MTPA from Kalta and 2MTPA sub-grade/tailings). After the operation of conveyer belt, SPCB may grant CTO upto 16 MTPA [(4MTPA from Barsua, 8 MTPA from Taldih and 4 MTPA from Kalta) and 2 MTPA sub-grade/tailings] based on site inspection of compliance of this conditions.
2.	Tarpaulin covering should be done appropriately with no scope for ore spillage. The Project Proponent shall take adequate measures to prevent the pilferage of mineral during its transportation. Drivers, truck operators should be imparted training on the adverse effects of dust pollution, water pollution due to ore spillage on roads.
3.	The Project Proponent needs to implement all possible mitigation measures while transporting the

	mineral by Road. Mechanically covered trucks should also be explored. Operators, supervisors, contractor personal should be properly trained on environmental aspects of ore/ waste spillage and resultant air and water pollution. Record of above training of the personal, supervisor/officials should be submitted to Regional office of MoEF&CC.
4.	PP shall ensure that there will be no dust generation during transportation of Iron ore to Barsua and Roxy railway siding. Wind screens can also be provided to prevent adjacent population from adverse effects of mineral transportation.
5.	PP shall install the remaining four fog cannons in the ML area by October 2025.
6.	PP has already installed 3 manual and 3 continuous ambient air quality monitoring station. PP shall install the remaining one continuous ambient air quality monitoring station till September 2025 and one Manual ambient air quality monitoring station by May 2025.
7.	PP shall complete the installation of STP by December 2026.
8.	PP shall complete the construction of remaining retaining wall/ gabion structure/garland drain by June 2025.
9.	PP shall install the remaining permanent water sprinkling system by September 2025.
10.	PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign “ EK Ped Ma ke Naam” and the details of the same shall be uploaded in the Meri Life portal(https://merilife.nic.in).
11.	All other terms and conditions of EC letter dated 28.04.2023 shall remain unchanged.

3.3.6.2. Standard

2(b)	Mineral beneficiation
Statutory compliance	
1.	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
2.	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
Statutory compliance	
1.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
2.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
3.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved

	by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
4.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
5.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
6.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
Air Quality Monitoring and Preservation	
1.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04/06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous and their no's.)
2.	The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
3.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
4.	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
5.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
6.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
7.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
8.	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
9.	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
10.	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
1	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

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1 2.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
1 3.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
1 4.	Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
1 5.	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
1 6.	Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
1 7.	Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
1 8.	The particulate matter emissions from the process stacks shall be less than 30 mg/Nm ³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
1 9.	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. b. Proper covered vehicle shall be used while transport of materials. c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
Air quality monitoring and preservation	
1.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
2.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986. 9) The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each). covering upwind and downwind directions.
3.	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each). covering upwind and downwind directions.
4.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
6.	The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
7.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
8.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

Water quality monitoring and preservation

1.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
3.	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
4.	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
5.	Adhere to 'Zero Liquid Discharge'
6.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
7.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
8.	The project proponent shall practice rainwater harvesting to maximum possible extent.
9.	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

Water Quality Monitoring and Preservation

1.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2.	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
3.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
4.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy

	rains and to check the water pollution due to surface run off.
5.	Tyre washing facilities shall be provided at the entrance of the plant gates.
6.	Water meters shall be provided at the inlet to all unit processes in the steel plants.
7.	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
8.	The proposed project shall be designed as Zero Liquid Discharge Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
9.	All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
10.	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
Noise monitoring and prevention	
1.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
2.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
Energy Conservation measures	
1.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
2.	Provide LED lights in their offices and residential areas.
Waste management	
1.	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
2.	Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)
Green Belt and EMP	
1.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
2.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
Water Quality Monitoring and Preservation in case of Beneficiation Plant	
1.	Tailing management plan shall be implemented as included in EIA report.
2.	Tailings from Iron Ore beneficiation plant shall be dewatered in filter press and no slime /tailing pond shall be

	permitted.
Public hearing and Human health issues	
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
2.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
3.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
4.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
Noise Monitoring and Prevention	
1.	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
2.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
Energy Conservation Measures	
1.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
2.	Restrict Gas flaring to < 1%.
3.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
4.	Provide LED lights in their offices and residential areas.
Corporate Environment Responsibility	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
2.	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest I wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company

	shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
5.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
6.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.
Waste Management	
1.	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
2.	Kitchen waste shall be composted or converted to biogas for further use.
3.	Used refractories shall be recycled as far as possible.
4.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
5.	The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/ . All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
6.	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
7.	Solid waste utilization: a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. b. PP shall recycle/reuse solid waste generated in the plant as far as possible. c. Used refractories shall be recycled as far as possible.
Miscellaneous	
1.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
2.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3.	44) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient

	location for disclosure to the public and put on the website of the company.
5.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
6.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
7.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
8.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
10.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
11.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
12.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
Green Belt	
1.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
2.	Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
3.	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
Public Hearing and Human Health Issues	
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
2.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
3.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche

	etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
4.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.
5.	All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.
Environment Management	
1.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
2.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
4.	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.
Miscellaneous	
1.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
2.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
5.	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
6.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
7.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as

	amended subsequently and put on the website of the company.
8.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
9.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
10.	The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
11.	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
12.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
13.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
14.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
15.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
16.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
17.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
1(a)	Mining of minerals
null	
1.	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
2.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

Statutory compliance	
1.	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
2.	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
3.	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area."
4.	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
5.	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
6.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
7.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

Statutory compliance	
1.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
2.	This Environmental Clearance (EC) is subject to orders/ judgment of Honble Supreme Court of India, Honble High Court, Honble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
3.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
4.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
5.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
7.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of

	drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
Air quality monitoring and preservation	
1.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
2.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
3.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986. 9) The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each). covering upwind and downwind directions.
4.	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each).covering upwind and downwind directions.
5.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
Air quality monitoring and preservation	
1.	The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
2.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.
3.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
Air quality monitoring and preservation	
1.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission

	standards.
2.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
Water quality monitoring and preservation	
1.	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
2.	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
3.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
4.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
5.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
Water quality monitoring and preservation	
1.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
2.	Adhere to Zero Liquid Discharge
3.	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
4.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
5.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
6.	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
7.	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and

	MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
8.	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
9.	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
10.	The project proponent shall practice rainwater harvesting to maximum possible extent.
11.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
Noise monitoring and prevention	
1.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
2.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
Noise and vibration monitoring and prevention	
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
2.	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
Noise and vibration monitoring and prevention	
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
Mining plan	
1.	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

Energy Conservation measures	
1.	Provide LED lights in their offices and residential areas.
2.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
Mining plan	
1.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
Waste management	
1.	Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)
2.	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
Land reclamation	
1.	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
2.	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
Land reclamation	
1.	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
2.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
Green Belt and EMP	
1.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

Transportation	
1.	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
Transportation	
1.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
Green Belt and EMP	
1.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
Public hearing and Human health issues	
1.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
Public hearing and Human health issues	
1.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
2.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
3.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
Green Belt	
1.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
Corporate Environment Responsibility	
1.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be

	carried out.
Public hearing and human health issues	
1.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
Corporate Environment Responsibility	
1.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
2.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.
Corporate Environment Responsibility	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
2.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
3.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
Miscellaneous	
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
2.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
3.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
4.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
5.	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of

	Environment (Protection) Act, 1986.
6.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
7.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
Miscellaneous	
1.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
2.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
3.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
4.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
5.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
6.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
7.	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Honble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
8.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
9.	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
10.	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
Miscellaneous	
1.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

2.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
3.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
4.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponents website permanently.
5.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
Corporate Environment Responsibility (CER)	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Enhancement of limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (ROM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the mine lease area of 417.95 ha at Revoor & Mellacheruvu villages, Mellacheruvu Mandal, Suryapet district, Telangana of M/s. Rain Cements Limited by RAIN CEMENTS TS LIMITED located at SURYAPET, TELANGANA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/TG/MIN/481840/2024	J-11015/152/2008-IA.II(M)	08/04/2025	Mining of minerals (1(a))

3.4.2. Project Salient Features

<p>The instant proposal for Environmental Clearance for Enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.</p> <p>2. The details of Project submitted by the Project Proponent are given as under:</p>

1. Project details:

Name of the Proposal	The instant proposal for Environmental Clearance for enhancement of limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.	
Location	Villages	Revoor & Mellacheruvu
	Tehsil/Taluka	Mellacheruvu
	District	Suryapet
	State / UT	Telangana
	Latitudes	16°49'23.7" N to 16°50'31.6" N
	Longitudes	79°57'39.0" E to 79°59'43.7" E
	SoI Topo sheet No.	E44T13 (56P/13) & E44T14 (56P/14)
Company's Name	M/s. Rain Cements Limited	
Accredited Consultant and certificate no.	J.M. EnviroNet Pvt. Ltd. Accredited EIA Consultant by NABET (QC I), Certificate No: NABET/EIA/2326/RA 0308, dated 29.11.2023 & valid up to 07.08.2026	
KML file	Submitted	
Seismic zone	Zone – II as per IS: 1893 (Part-I) : 2002	

2. Category details:

Category of the project	Category “A”.
Schedule No	Project or Activity 1(a) – 3
Mining lease Area (MLA) (in ha.)	417.95 Ha
General Conditions (if any)	NIL

iii. PP has obtained the Terms of Reference vide file no. J-11011/152/2008-IA. II (I) and vide online Proposal No. IA/TG/MIN/256638/2022 on 14.09.2022 for enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (ROM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the mine lease area of 417.95 ha at Revoor & Mellacheruvu villages, Mellacheruvu Mandal, Suryapet district, Telangana by M/s. Rain Cements Limited”.

4. 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.	Grant of Mining Lease vide G.O Ms No 289 in favor of M/s. Laxmi Narayana Mining Company	08.05.1981	Limestone (Major)	29.09.1981 to 28.09.2001	Govt. of Andhra Pradesh	Acre 43 0.30 Guntas
2.	Transfer of Mining Lease vide G.O Ms No 402 from M/s. Laxmi Narayana Mining Company	15.09.1984	Limestone (Major)	For the unexpired portion of the lease i.e., upto 28.09.2001	Govt. of Andhra Pradesh	Acre 43 0.30 Guntas

	pany to M/s. Priyadarshini Cements Limited					
3.	Grant of Mining Lease vide G.O Ms No 405 in favor of M/s. Priyadarshini Cements Limited	22.09.1988	Limestone (Major)	Valid upto 28.09.2001	Govt. of Andhra Pradesh	Acre 80.975 Guntas
4.	Grant of Mining Lease vide G.O Ms No 307 in favor of M/s. Priyadarshini Cements Limited	06.06.1990	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 111.00 Guntas
5.	Grant of Mining Lease G.O Ms No 339 in favor of M/s. Priyadarshini Cements Limited for clubbing of the three mining leases (G.O Ms No. 402, 405 & 307)	01.10.1991	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 622.29 Guntas
6.	Grant of Mining Lease vide G.O Ms No 288 in favor of M/s. Priyadarshini Cem	18.08.1998	Limestone (Major)	20 years (Valid upto 10.02.2019)	Govt. of Andhra Pradesh	Acre 127.07 Guntas

	ents Limited					
7.	Grant of Mining lease vide G.O Ms No 367 in favor of M/s. Priyadarshini Cements Limited	27.10.1998	Limestone (Major)	Valid upto 10.02.2019	Govt. of Andhra Pradesh	Acre 105.32 Guntas
8.	Grant of Mining Lease vide G.O Ms No 369 in favor of M/s. Priyadarshini Cements Limited	27.10.1998	Limestone (Major)	Valid upto 10.02.2019	Govt. of Andhra Pradesh	Acre 176.25 Guntas
9.	Grant of Mining Lease vide G.O Ms No 505 in favour of M/s. Priyadarshini Cements Limited for clubbing of the four-mining lease (G.O Ms No. 339, 369, 367 and 288)	19.09.2000	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 1030.93 Guntas
10.	1 st renewal of Mining Lease vide G.O Ms No 192 in favour of M/s. Priyadarshini Cements Limited	04.05.2002	Limestone (Major)	20 years w.e.f 28.09.2001 to 27.09.2021	Govt. of Andhra Pradesh	Acre 1032.13 Guntas

11.	Transfer of Mining Lease vide G.O Ms No 238 from M/s. Priyadarshini Cements Limited to M/s. Rain Industries Limited	28.08.2006	Limestone (Major)	Valid upto 27.09.2021	Govt. of Andhra Pradesh	Acre 1032.13 Guntas
12.	Transfer of Mining Lease vide G.O Ms No 22 from M/s. Rain Industries Limited to M/s. Rain Cements Limited	13.11.2014	Limestone (Major)	Valid upto 27.09.2021	Govt. of Telangana	Acre 1032.13 Guntas (417.95 ha)
13.	Grant of Mining Lease vide G.O Ms No 72 in favour of M/s. Rain Cements Limited	24.08.2017	Limestone (Major)	50 Years (29.09.1981 to 28.09.2031)	Govt. of Telangana	Acre 1032.13 Guntas (417.95 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.	Mining lease executed vide proceeding No 1720/M/81 on 29.09.1981	29.09.1981	28.09.2001	Limestone	Acre 430.30 Guntas
2.	Mining lease executed vi				Acre 80.

	de proceeding No 2785/ M1/1988 on 05.10.1988				975 Gun tas
3.	Amalgamation the three leases (G.O Ms No. 402, 405 and 307) was execut ed vide proceeding No 2 394/M1/1991 on 11.03.1 992	01.10.1991	27.09.2001	Limestone	Acre 62 2.29 Gun tas
4.	Mining lease executed vi de proceeding No 433/M 1/1986, dated 11.02.199 9	18.08.1998	10.02.2019	Limestone	Acre 12 7.07 Gun tas
5.	Mining lease executed vi de proceeding No 11/M 1/1985, dated 11.02.199 9	27.10.1998	10.02.2019	Limestone	Acre 10 5.32 Gun tas
6.	Mining lease executed vi de proceeding No 1121/ M1/1985, dated 11.02.1 999	27.10.1998	10.02.2019	Limestone	Acre 17 6.25 Gun tas
7.	Amalgamation the four l eases (G.O Ms No. 339, 369, 367 and 288) was e xecuted vide proceeding No 866/M2/2000, dated 11.01.2001	19.09.2000	27.09.2001	Limestone	Acre 103 0.93 Gun tas
8.	Mining lease deed execu tion of 1st Renewal vide proceeding no. 2720/M 2/2002 dated 14.05.2002	28.09.2001	27.09.2021	Limestone	Acre 103 2.13 Gun tas
9.	Transfer deed in favour of M/s Rain Industries L imited was executed vid e proceeding no. 2720/M 2/2000 on 20.10.2006.	28.08.2006	27.09.2021	Limestone	Acre 103 2.13 Gun tas

10.	Transfer deed in favour of M/s Rain cement Limited was executed vide proceeding no. 667/M2/2008 on 07.02.2021	13.11.2014	27.09.2021	Limestone	Acre 103 2.13 Gun tas (417.95 ha)
11.	Supplementary lease deed executed in favour of M/s Rain cement Limited vide Proceeding No. 667/M2/2008 on 10.02.2018	27.08.2017	29.09.2031	Limestone	Acre 103 2.13 Gun tas (417.95 ha)

5. Land Area Breakup

Private land	198.6156 ha
Government land	219.3344 ha
Forest Land	-
Total Mining lease area (MLA), Ha	417.95 ha
Private land for crusher, workshop & other infrastructure outside the MLA	-

6. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DM G)	Letter No.	letter no AP/NLG/MP/LST-22/Hyd
	Date	02.11.2023
	Validity	Valid upto 2026 - 2027
Mining Parameters	Quantitative Description	

Method of Mining	Mining operation is being/will be carried out by fully mechanized opencast method for excavation of limestone.
Drilling/Blasting	<p>Drilling is to be carried out by deploying 150 mm dia. Drill equipped with in-built arrangement of water sprinkling for dust suppression and separate dust extraction system and this arrangement makes operations practically dust free. Blasting operations are proposed to be carried out in a controlled manner to minimize fly rock generation for safety of civil structures, machines and nearby habitation and agricultural fields under the supervision of Assistant Manager (Mines), well versed with technique to ensure quality and safety in the work. Due care is taken to keep the ground vibrations and air blast levels to the lowest possible limits to avoid any adverse impacts on the surrounding environment. Ultimate pit slope will be 55°.</p> <p>The drill parameter:</p> <ul style="list-style-type: none"> · Average Spacing = 5.5 m · Average Burden = 4 m · Average height of bench = 8 m · Average bulk density = 2.5 Tonnes/m³ <p>Blasting</p> <p>Various types of explosives such as ANFO, slurry explosive etc. are being/ will be used for blasting. NO NEL detonating fuse is being/ will be used since multi row system of firing is being/ will be carried to reduce the ground vibration, noise, fly rock etc. due to blasting.</p> <p>Blasting operations are proposed to be carried out in a controlled manner to minimize fly rock generation for safety of civil structures, machines and nearby habitation and agricultural fields.</p> <p>The details of blast parameters to be used in the mines are as under:</p> <ul style="list-style-type: none"> · Drill holes diameter (mm) = 150 ·

	<p>Burden (m) = 4 m</p> <ul style="list-style-type: none"> · Spacing (m) = 5.5m · Charge per hole = 77.5 Kg · Maximum holes blasted per delay = 36 · Average power factor: 7.0 · Firing sequence = Hole to Hole (using NONEL)
Geological Reserves	325.47 million Tonnes as on 01.10.2023
Mineable Reserves	196.14 million tonnes as on 01.10.2023
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejecs/ Waste, MTPA)	<ul style="list-style-type: none"> · Limestone: 3.94 Million TPA · Top Soil: 0.0075 Million TPA · Total Excavation: 3.9475 million TPA
Life of mine	~52 Years (As on 01.10.2023)
Mine Bench Height & Bench Width	<p>Bench height: 8 m</p> <p>Bench Width: 15 m</p>
No. of Mine Benches	4 Numbers
plan period m bgl	47.32 m AMSL (34.84 m bgl)
Ultimate Depth of Mining, m bgl	47.32 m AMSL (34.84 m bgl)
Ground Water Table, m bgl	40 m bgl
Details of ground water intersection	Ultimate mine working depth will be 34.84 m and water table will be 40 m. Hence, water table will not be intersected due to mining
Individual bench slope	60° and Ultimate Slope of 55 °

Overall pit slope	45°									
Details of existing/ proposed Crusher	There is no crusher in the mining lease area. Excavated limestone is being/ will be transported to crusher (located at Plant Site) through tippers (35 Tonnes).									
Mineral Beneficiation	None									
RoM output size	- 25 mm									
Transportation details including capacity of dumper/tipper, mode of transport and distance	Excavated limestone is being/ will be transported to crusher (located at Plant Site) through tippers (35 Tonnes).									
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<table><tr><td>Nature of Waste</td><td>Generation</td><td>Management</td></tr><tr><td>Top Soil</td><td>Plan Period: 6215 cum</td><td>Top soil generated will be utilized for plantation and green belt development</td></tr><tr><td>OB Waste</td><td colspan="2">No OB waste will be generated till conceptual period.</td></tr></table>	Nature of Waste	Generation	Management	Top Soil	Plan Period: 6215 cum	Top soil generated will be utilized for plantation and green belt development	OB Waste	No OB waste will be generated till conceptual period.	
Nature of Waste	Generation	Management								
Top Soil	Plan Period: 6215 cum	Top soil generated will be utilized for plantation and green belt development								
OB Waste	No OB waste will be generated till conceptual period.									

Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-
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7. Water requirement

Total water requirement	250 KLD	Fresh water	250 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump.		
Permission for withdrawal/ intersection along with details of grant and its validity	Water permission obtained from Telangana Ground Water Department on 24.08.2017		

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

Particulars	Villages	Directions
Nearest village	Village Revoor in SE (110 m from ML boundary & 450 m from UPL)	
	Village Kappalakunta Tanda in NW (Adjacent to ML & 750 m from UPL)	
	Village Medlache in West (Adjacent to ML & 550 m from UPL)	
Nearest Town / City	Kodad	(~15 km in North direction)
Nearest State/National Highway	NH-65	(~ 13.5 Km in NE direction)
	NH-167	(~12.0 Km in NW direction)

Nearest Railway Station	Ramapuram	(~2.0 Km in NE direction)
	Mellacheruvu	(~4.0 Km in SW direction)
Nearest water bodies	Name	Distance and Direction
	Seasonal Nala	In ML area Revoor Nala flowing West to East in Southern part. A seasonal drainage channel originating from the Northern Part of the area is flowing in between Pit No. 1 and Pit No.2 towards Southeast, and joins with Revoor Nala.
	Canal	~2.75 Km in WSW
	Mellacheruvu Lake	~3.5 Km in WSW
	Mukteshwaram Branch Canal	~ 4.0 km in North
	Ganapavram lake	~ 5.5 Km in NNW
	Palleru River	~ 5.85 Km in NE
	Antra Ganga vagu	~ 6.85 km in NNE
	Yerravaram cheruvu	~ 7.5 Km in NNW
	Gundla Vagu	~7.85 Km in SSE
	Krishna River	~8.0 Km in ESE
	Choutupally Lake	~ 8.5 Km in WSW

	Mathangamma Pedda cheruvu	~ 9.0 Km in NNE
	Redlakunta Branch Canal	~ 9.0 km in North
	Apart from these other small Nalas/nadis are also found in the 10 km radius of the lease area.	
Forest	Yepalmadhvaaram RF	~4.0 Km in SW direction
	Buduvada RF	~4.5 Km in ENE direction
	Yepalmadhvaaram RF	~4.85 Km in SW direction
	Balusupasdu RF	~6.5 Km in NE direction
	Chintalapalem RF	~ 7.0 Km in SSE direction
	Chintalapalem RF	~ 7.0 Km in SSW direction
	Nemalipuri RF	~7.87 km in SSE direction
9. 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	No forestland involved in the Proposed block. Letter issued from State Forest Department on 12.01.2024 in this regard.

National Park	No	PP submitted letter dated 12.01.2024 from State Forest Deptt. Stating that No National Park, Wild Life Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/ Elephant Reserves, Reserve/ Protected Forest etc are located within 10 km radius study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	
Schedule-I species (No. and name of scheduled-I species with authenticated letter)	Yes	There are 9 Schedule- I fauna species i.e., Wild dog (<i>Cuon alpinus</i>), Indian fox (<i>Vulpes bengalensis</i>), Common Indian Krait (<i>Bungarus caeruleus</i>), Indian Chameleon (<i>Chamaeleon Zeylanicus</i>), Sand boa (<i>Eryx johnii</i>), Indian Monitor Lizard (<i>Varanus Benghalensis</i>), Indian cobra (<i>Naja naja</i>), Rat snake (<i>Ptyas mucosus</i>), viper (<i>Daboia russelii</i>), found in the buffer zone of the study area according to (IWPA) Indian Wild Life (Protection) Amendment Act, 2022.
Wildlife Conservation Plan	Yes	
		Wildlife Conservation plan over an amount of Rs. 59.25 Lakh for one year has been approved from Principle Chief Conservator of Forests (WL) & Chief Wildlife Warden vide letter No PCCF WL1/WL07/43/2023 dated 28.06.2024.

10. Green belt/ Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area to be covered under greenbelt/plantation will be 39.24 ha (1.82 ha on backfilled area, 12.75 ha along the periphery of mine lease area, 24.67 ha on the undisturbed area).
Budget for green plant & plantation till the end of life of mine.	Rs 1.25 Crore

Budget for nursery	None
Details of existing plantation and its survival rate	An area of 30.77 ha has been covered with 159022 no of trees
No. of tree cuts in the mine lease area and compensatory afforestation	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & Non mineralized areas	1.98 ha on 7.5 m safety zone
50 m safety zone of nallah, roads, electric lines	0.82 ha Plantation in safety zone of Road & Railway line
500 m safety zones of nearest habitation villages (Exhausted Pit Boundaries & Non-Mineralized areas)	36.47 ha plantation on un-worked area
11. Baseline detail	
Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	Post Monsoon Season (Oct to Dec., 2022)
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post - Monsoon
Predominant Wind direction	North-West

ion (From)	
Ambient Air Quality (n o. of locations) and results	Ambient Air Quality Monitoring at 14 Locations:
Noise level (no. of locations) and results	PM ₁₀ - 44.5 to 90.5 µg/m ³ , PM _{2.5} 25.2 to 52.5 µg/m ³ , SO ₂ – 5.9 to 17.2 µg/m ³ , NOx – 11.5 to 31.2 µg/m ³ Noise Level Monitoring at 11 locations
Water Quality (no. of locations) and results	During Day Time – 50.6 to 67.3 Leq dB (A), During Night Time – 41.3 to 52.4 Leq dB(A)
Soil Quality (no. of locations) and results	Surface Water Sampling at 14 locations pH - 7.11 to 8.47, DO - 6.4 to 7.2 mg/l, BOD - 4.6 to 10 mg/l, COD - 20 to 40 mg/l
Hydro geological study and results	Ground Water Sampling at 11 locations pH - 7.18 to 7.82, Total Hardness – 237.6 to 623.7 mg/l, Total dissolved solids- 430 to 1172 mg/l, Chlorides – 92.5 to 272.4 mg/l, Fluorides - 0.46 to 1.18 mg/l, Other Heavy metals-Iron- 0.04 to 0.32 mg/l
Traffic study (no. of locations) and results	Soil Sampling at 11 locations: pH – 6.81 to 8.06, potassium (624.8 to 1678.2 kg/ha), phosphorus (24.5 to 40.7 kg/ha), nitrogen (70.28 to 116.57 kg/ha) & organic matter (0.98 to 1.52 %)
12. Public Hearing (PH) Details:	
Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	“Indian Express newspaper” and “Mana Telangana newspaper” on 16.12.2023
Date of PH	20.01.2024 at 12:30 PM

Venue	Project Site
Chaired by	Chaired by: · Shri. S Venkata Rao, District Magistrate of Suryapet · Sri. P. Suresh Babu, Environmental Engineer, TGPCB, Suryapet
Main issues raised during PH	Infrastructure Development, Education Facility, Livelihood Enhancement & Environment Conservation and Health Facility.
Budget proposed for addressing issues raised during PH over 3 years	Rs 0.90 Crore

13. 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	PP has obtained the CTE vide letter No APPCB/PTN/NLG/32/CFE/HO/2011-813, dated 18.06.2011
Consent to Operate	PP has obtained the CTO vide Consent Order No: 210523194658 dated 17.01.2022, which is valid up to 31.10.2026
Certified Compliance Report and Inspection date	PP has submitted the Certified Compliance Report for Existing Environmental Clearance issued from MoEFCC vide letter No ENV/IRO-HYD/MR-59/A/2021 dated 08.04.2025 (Site visit date: 25.03.2025)
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	PP has submitted year-wise production details of mine has been certified by State Mines Dept vide letter dated 12.07.2022

14. Rehabilitation & Resettlement:

R & R details	<p>Total Mining Lease area is 417.95 ha which spreads over the part of villages Mellacheruvu and Revuru. Out of the total Mining lease area, 219.3344 ha Govt. Land and 198.6156 ha Private Agricultural Land. Out of the patta land, company has purchased 77.131 ha and the rest 121.485 ha will be acquired by year 2028.</p> <p>This is running mine and expansion in limestone production is proposed within existing mining lease area.</p>
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15. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	PP has submitted an affidavit vide letter dated 17.04.2025

16. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit vide letter dated 17.04.2025
Undertaking by Project Proponent in EIA/EMP report	PP has submitted an undertaking dated 17.06.2024
Undertaking by Consultant in EIA/EMP report	The Consultant has submitted an undertaking for preparation of EIA-EMP report in its letter head dated 17.06.2024
Plagiarism Certificate	PP has obtained the software generated Plagiarism certificate (Plagiarism Checker X-Report)) vide letter dated 04.03.2025.

17. The Project Proponent has submitted the point-wise reply vide letter dated 03.03.2025 against the EDS raised

S.No	EDS Points	Reply by PP
1	PP needs to submit Complete TOR compliance not record.	PP has submitted the point wise compliance of Terms of reference granted by MoE

		FCC, New Delhi vide letter no. IA-J-110 15/152/2008-IA.II(M) dated 14.09.2022 in favor of M/s. Rain Cements Ltd.
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PP has submitted the point-wise reply on 08.04.2025 against the EDS raised on 20.03.2025, as mentioned below

S.No	EDS Points	Reply by PP
1	PP needs to submit NOC from Railway not found. Please expedite.	PP has obtained the NoC from Railway department vide letter dated 28.02.2025
2	PP needs to submit legible copies of the annexure mentioned in the EIA-EMP is uploaded in Parivesh Portal	Legible copies of the annexures mentioned in EIA-EMP report is uploaded in Parivesh Portal.
3	PP needs to submit the software generated Plagiarism certificate in EIA-EMP report	PP has obtained the software generated Plagiarism certificate (Plagiarism Checker X-Report)) vide letter dated 04.03.2025
4	PP needs to submit a legible copy of the certificate from State Forest Department regarding the presence of National Park/ Wildlife Sanctuary/Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area.	There is no National Park/ Wildlife Sanctuary/Biosphere Reserve/ Eco-Sensitive Zone within 10 km radius study area. Location map has been authenticated from DFO and same has been submitted from Forest Department in their letter No 1315/2022/53 dated 12.01.2024.

18. Details of the Environmental Management Plan (EMP)

Activities	Capital cost (Lakh)	Recurring cost (Lakhs/annum)
Environment Management Plan	Rs. 158.56 lakhs (Rs.92.48 Lakh existing + Rs. 66.08 Lakh proposed)	Rs. 46.91 Lakhs (Rs.19.6 lakh existing + Rs. 27.31 Lakh proposed)

19. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of public hearing)	<ul style="list-style-type: none"> · Cost for EMP: Rs. 1.58 Crore · Cost for physical targets: Rs. 0.90 Crore · Cost for Wildlife conservation: Rs 0.60 Crore · Total: Rs. 3.08 Crore
Project Cost	Rs. 15.5 Crores
Employment	60 persons

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

The Expert Appraisal Committee (EAC) deliberated the instant proposal for Enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.

The project is classified under Category "A" and falls under Activity 1(a)-3 of the schedule of the EIA Notification, 2006.

PP had obtained the Terms of Reference on 14.09.2022 for enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (ROM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the mine lease area of 417.95 ha.

The Project Proponent and the consultant presented the key site features using a KML file. The project site is located approximately 13.5 km northeast of National Highway (NH) 65 and about 12.0 km northwest of NH-167. Nearby villages include Revoor to the southeast (approximately 110 meters from the mining lease boundary and 450 meters from the ultimate pit limit), Kappalakunta Tanda to the northwest (adjacent to the mining lease and 750 meters from the ultimate pit limit), and Shiva Balaji Tanda to the west (adjacent to the mining lease and about 550 meters from the ultimate pit limit).

The nearest railway stations are Ramapuram, located approximately 2.0 km to the northeast, and Mellacheruvu, located about 4.0 km to the southwest. Revoor Nala flows from west to east through the southern portion of the mining lease area. Water bodies including rivers, nalas, canals, and ponds, are present within the study area. Additionally, a seasonal drainage channel originates from the northern part

of the area, flowing between Pit No. 1 and Pit No. 2 towards the southeast, where it merges with Revoor Nala.

The Project Proponent has stated that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger Reserves, Elephant Reserves, or Reserved/Protected Forests are located within a 10 km radius of the project site. However, same water bodies and Reserved Forest patches exist within the 10 km study area.

The mining lease, covering a total area of 417.95 hectares, is valid until 29.09.2031, with the supplementary lease deed executed on 10.02.2018. The lease area includes 198.6156 hectares of private land and 219.3344 hectares of government land. PP has submitted the certificate from the State Forest Department vide letter dated 12.01.2024 wherein it has been mentioned that the forest is not involved within mine lease area. Out of the patta land, company has purchased 77.131 ha and rest 121.485 ha will be acquired by year 2028.

The Modified Mining Plan, along with the Progressive Mine Closure Plan, was approved on 02.11.2023 and remains valid until 2026–2027. The ultimate mining depth is proposed at 47.32 meters above mean sea level (AMSL). The groundwater table in the area is located at a depth of approximately 40 meters below ground level (bgl), while the ultimate mine working depth will be 34.84 meters. The mining operations will not intersect the groundwater table.

PP further reported that the total fresh water requirement for the project is 250 KLD, which will be sourced from groundwater and rainwater collected in the mine sump. The PP has obtained the necessary permission for groundwater withdrawal from the Telangana Ground Water Department.

The PP has proposed the development of a greenbelt and plantation over a total area of 39.24 hectares, comprising 29.56 hectares of existing plantation and 9.68 hectares of new plantation. A total of 176,247 saplings are proposed to be planted, with an estimated budget of Rs. 125.49 lakhs.

The PP also submitted that baseline environmental data was collected during the post-monsoon season (October to December 2022), with the predominant wind direction observed from the north. Studies conducted included monitoring of ambient air quality, noise levels, water quality, soil quality, hydrogeological assessment, and traffic analysis. The results of these studies indicate that all monitored parameters are within the prescribed regulatory limits.

A village road runs along the eastern side of the lease area, with the ultimate pit limit located approximately 250 meters away. The ultimate pit limit is also situated about 110 meters from the nearby railway line. To assess the potential impact of blasting activities, a blast vibration study was conducted by the National Institute of Technology (NIT), Karnataka. The study was carried out using the proposed blast configurations, which involved a maximum of 39 blast holes per round, with a total explosive charge of 3,152 kg and a maximum charge per delay ranging from 81 to 101 kg. The study findings indicated that the intensity of ground vibrations decays significantly beyond a distance of approximately 250 meters from the blast site. Fly rock was observed to be restricted within a maximum distance of 35 meters. Noise levels recorded near the nearby villages were minimal. The study further concluded that

the blasting operations carried out at Rain Cements Limited's limestone mine had no adverse impact on the houses and structures in Revuru village, Siva Balaji Tanda, Kappalakunta Tanda, or on the Jaggaiahpet-Vishnupuram railway line. Based on the recommendations of the blasting study, a safety buffer zone of 100 meters has been demarcated as a no-mining zone on one side of the railway line, while the opposite side will be developed as a greenbelt.

PP has submitted NOC from South Central Railway Department vide letter dated 28.02.2025 wherein the said letter is has been stated that considering Railway line as sensitive structure, peak particle velocity of less than 5 mm/sec is to be ensured at Railway track as per the permissible standards mentioned at Para 7 DGMS (Tech) (S&T) circular no. 7 of 1997 dated 29.08.1997.

EAC noted the submission of PP and suggested that they needs to inform the local people, particularly the station master near the railway site and they have to prepare a protocol and communicate with the railway department, before conducting blasting at the project site.

The PP informed that the Public Hearing for the project was conducted on 20.01.2024. The hearing was chaired by the District Magistrate of Suryapet and attended by the Environmental Engineer, Telangana State Pollution Control Board (TGPCB), Suryapet. During the Public Hearing, key concerns raised by the local community included demands for infrastructure development, improvement in education facilities, enhancement of livelihood opportunities, environmental conservation measures, and better healthcare services. To address these concerns, the Project Proponent has proposed a budget of Rs. 90 lakhs, to be spent over a period of three years. The proposed allocation includes Rs. 13.5 lakhs for strengthening education facilities, Rs. 52.5 lakhs for infrastructure development, and Rs. 24 lakhs for providing healthcare support.

The EAC took note of the submissions made by the Project Proponent and advised to take up the issues raised in public hearing and execute the action plan with respect to public hearing as per their commitment.

In this regard, the EAC advised that the Project Proponent should consult with the Directorate of General of Mines Safety (DGMS) regarding safety aspects. The Committee further suggested that the local farmers and residents should be informed well in advance about blasting schedules. It was emphasized that all necessary precautions must be strictly followed during the handling and use of explosives, and that every effort must be made to prevent accidents and minimize inconvenience to the surrounding communities.

The latest site visit for the expansion proposal was conduction by the Sub-Office of the Ministry located at Hyderabad on 25.03.2025. As per the certified compliance report submitted vide letter dated 08.04.2025, EAC noted that most of the conditions are complied or agreed to comply. EAC also observed the Sub-Office vide the CCR dated 08.04.2025 has directed PP to not plant Conocarpus species in the green belt since, it is an exotic species. EAC accordingly, asked PP to comply the recommendation of the report dated 08.04.2025.

Based on aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 43rd EAC meeting held on 22-23 April, 2025,

under the provisions of the EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal for the grant of enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana and is subject to the following specific conditions, in addition to the specific conditions applicable to Non-Coal mining projects: -

3.4.5. Recommendation of EAC

Recommended

3.4.6. Details of Environment Conditions

3.4.6.1. Specific

Specific Condition	
1.	PP shall comply with conditions of NoC issued from South Central Railway Department vide letter dated 28.02.2025. PP needs to prepare a protocol during blasting operations and same has to be communicated with the railway department at the project site. PP needs to ensure that there is no blasting during movement of trains.
2.	PP shall comply with the recommendations of the blast vibration study conducted by the National Institute of Technology (NIT), Karnataka.
3.	No blasting activities shall take place within 500 meters from the residential areas located in the villages of Revoor, Kappalakunda Tanda and Shiva Balaji Tanad without prior permission from DGMS.
4.	PP shall not plant Conocarpus species in the green belt, as given in the recommendations made in Certified Compliance Report dated 08.04.2025.
5.	The natural water bodies and or streams which are flowing in and around the mine lease area should not be disturbed. PP shall consult state Water Resource department and SPCB regarding safeguards for Nallah/Stream/naadi and follow their instructions. Implementation status of this condition should be communicated to Regional office, Bangalore.
6.	PP shall carryout the blasting in a controlled manner such that the direction of the blasting should be perpendicular to the village/ habitations. PP needs to strictly adhere to MMR (Metalliferous Mines Regulation) 1961 / DGMS guidelines for undertaking blasting activity so that safety is ensured and chances of ground vibration and overpressure are minimized. PP needs to monitor each blast by Seismograph and maintain blast wise record.
7.	The Project Proponent shall continue to monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, at crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
8.	The Project Proponent should install Continuous Ambient Air Quality Monitoring Stations

	(CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
9.	The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance reports.
10.	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
11.	Tarpaulin covering should be done appropriately with no scope for ore spillage. The Project Proponent shall take adequate measures to prevent the pilferage of mineral during its transportation. Drivers, truck operators should be imparted training on the adverse effects of dust pollution, water pollution due to ore spillage on roads.
12.	The Project Proponent needs to install the permanent water sprinklers in addition to mobile water tankers along the haul road and the approach road. Further, 06 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. One fog cannon at nearby school shall be installed along with metal wind screen. Fog cannons may also be placed near habitation side.
13.	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years. PP needs to install solar power plant at the earliest to reduce dependency on conventional power supply from state.
14.	The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. 3 sides of crusher should be covered with Noise barrier sheets. Permanent water sprinklers needs to be installed at 3 sides of crushers for dust suppression and near the unloading platform of limestone.
15.	The Project Proponent should adopt the proper mitigation measures as proposed under EMP. 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.
16.	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.
17.	The Project Proponent shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to RO, MoEF&CC.
18.	The Project Proponent shall ensure the survival rate of 95% for planting the gap plantation and new plantation. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving

	the target survival rate shall be submitted to the Ministry's Integrated Regional Office. Density of plantation should be 2500 plants/ha). PP shall make provision for drip irrigation to conserve the water. PP should plant fruit bearing trees, along with other native and allied species within the ML area. Thick green belt between the mining zone and habitations shall be maintained so that there is adverse effects of dust and other mining operations. This green belt shall be developed at the earliest.
1 9.	To address the concerns raised by the public in the public hearing, PP should complete its public hearing commitments within 3 years. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities. PP should ensure that points raised with respect to land acquisition in public hearing are properly addressed and a fair compensation of land is paid to PAPs/ PAFs. PP shall submit a report related to land acquisition to concerned Regional Office of MoEFCC, District Collector/ District Magistrate and also copy to IA (NCM) MoEFCC in every three months, for initial two years. MoEFCC may take appropriate decision in this regard based on the reports submitted by PP in this regard.
2 0.	The Project Proponent needs to provide the good quality drinking water supply and also by laying network of pipelines to the local people of the nearby village Harima & Sarasani free of cost. PP needs to install water treatment plant and process the water before supplying to the villages.
2 1.	The Project Proponent shall provide the rainwater harvesting structure at mine offices and quarters/colonies in consultation with CGWA/SGWB to recharge the ground water.
2 2.	PP needs to construct sedimentation ponds, check dam, gabion structures, retaining wall, garland drain around the dumps (ore, waste, top soil) etc. to safeguard the natural Streams/Nallahs flowing in and around the Lease area.
2 3.	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. PP shall provide training related to sewing, laptop/ mobile repairing, masala(species) grinding/manufacturing etc. to the people of nearby villages so that alternate source of income is generated. PP should maintain a register of such training programs and submit a copy of concerned Regional Offices along with six monthly compliance report.
2 4.	PP shall submit certified compliance report from Regional Office. MoEFCC with respect to compliance of EC conditions stipulated within two years of this EC.
2 5.	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people villagers and also the monitor the health impacts due to mining activity. A register of such medical camps for local people should be kept and a copy shall be submitted to concerned Regional Office of MoEFCC.
2 6.	The mobile water tankers should be used in the ML area for dust suppression and control. A logbook of water tankers should be maintained mentioning running hours, kilometre reading, and maintenance hours of water tankers for each shift. PP shall use non-toxic chemicals for dust suppression in order to reduce the total water requirement. Copy of log book should be submitted to

	Regional Office of MoEFCC.
2 7.	The Project Proponent should take adequate measures to prevent the fly rock falling onto the nearby habitations and also the Project Proponent needs to set up a permanent monitoring in the nearby village to monitor the blast induced ground vibration and air over pressure.
2 8.	The Project Proponent needs to reduce the dependency upon the ground water, surface water (water from rivers, etc.) and it shall construct water reservoirs (at least three) within the lease area for meeting its day-to-day water needs. An implementation report in this regard needs to be submitted to Ministry's Regional Office.
2 9.	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
3 0.	Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
3 1.	Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
3 2.	PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign "EK Ped Ma ke Naam" () and the details of the same shall be uploaded in the Meri Life portal(https://merilife.nic.in).
3 3.	PP shall ensure that all type of plastic waste generated from the mines shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016. In pursuant to Ministry's OM dated 18/07/2022 PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report being submitted by PP.

3.4.6.2. Standard

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1.	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
2.	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The

	CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
Statutory compliance	
1.	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
2.	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
3.	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
4.	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
5.	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
6.	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area."
7.	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
Statutory compliance	
1.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
2.	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
3.	This Environmental Clearance (EC) is subject to orders/ judgment of Honble Supreme Court of India, Honble High Court, Honble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
4.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
5.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
6.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

7.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
Air quality monitoring and preservation	
1.	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each).covering upwind and downwind directions.
2.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986. 9) The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each). covering upwind and downwind directions.
3.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
4.	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
5.	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
Air quality monitoring and preservation	
1.	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
2.	The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
3.	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.
Air quality monitoring and preservation	

1.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
2.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
Water quality monitoring and preservation	
1.	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
2.	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
3.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
4.	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
5.	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
Water quality monitoring and preservation	
1.	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
2.	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
3.	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
4.	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-

	monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
5.	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
6.	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
7.	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
8.	The project proponent shall practice rainwater harvesting to maximum possible extent.
9.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
10.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
11.	Adhere to Zero Liquid Discharge
Noise monitoring and prevention	
1.	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
2.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
Noise and vibration monitoring and prevention	
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
2.	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
Noise and vibration monitoring and prevention	
1.	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
Mining plan	
1.	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (

	method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
Energy Conservation measures	
1.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
2.	Provide LED lights in their offices and residential areas.
Mining plan	
1.	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.
Waste management	
1.	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
2.	Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)
Land reclamation	
1.	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
2.	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
Land reclamation	
1.	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
2.	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

Green Belt and EMP	
1.	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
Transportation	
1.	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
Transportation	
1.	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
Green Belt and EMP	
1.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.
Public hearing and Human health issues	
1.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
Public hearing and Human health issues	
1.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
2.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
3.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
Green Belt	
1.	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation

	made in approved mine plan.
Corporate Environment Responsibility	
1.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
Public hearing and human health issues	
1.	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
Corporate Environment Responsibility	
1.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.
2.	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest I wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
Corporate Environment Responsibility	
1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
2.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
3.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
Miscellaneous	
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
2.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
3.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
4.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of

	Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
5.	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
6.	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
7.	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
Miscellaneous	
1.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
2.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
3.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
4.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
5.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
6.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
7.	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
8.	In pursuant to Ministrys O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Honble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
9.	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
10.	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
Miscellaneous	

1.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
2.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
3.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
4.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponents website permanently.
5.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.

Corporate Environment Responsibility (CER)

1.	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
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3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Proposed Rohida Limestone Mine of Kamlesh Meta Cast Private Limited with production capacity of 8.91 Million TPA Total Excavation (Limestone (Mineral) – 2.85 Million TPA, Mineral Reject- 0.24, Soil – 0.04 Million TPA & OB – 5.78 Million TPA) with proposed 1000 TPH of crusher over an area of 800.9935 ha located in Village(S)- Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil – Pindwara, District – Sirohi, Rajasthan. b y KAMLESH METACAST PRIVATE LIMITED located at SIROHI, RAJASTHAN			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/RJ/MIN/509472/2024	IA-J-11015/81/2024-IA-II(N CM)	06/12/2024	Mining of minerals (1(a))

3.5.2. Project Salient Features

The instant proposal is for Reconsideration of Terms of Reference Rohida Limestone Mine with production capacity of Limestone 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, Total excavation 8.91MTPA along with 1000 TPH of Crusher in mine lease area of
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800.9935ha by M/s Kamlesh Meta Cast Private Limited, located at villages Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan.

2. The details of Project submitted by the Project Proponent are given as under:

1. Project details:

Name of the P roposal	The instant proposal is for Reconsideration of Terms of Reference Rohida Limestone Mine with production capacity of Limestone 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, Total excavation 8.91MTPA along with 1000 TPH of Crusher in mine lease area of 800.9935ha by M/s Kamlesh Meta Cast Private Limited, located at villages Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan	
Location	Village (s)	Rohida (Rohera as per toposheet), Bharja, Taroongi (Tarangi as per toposheet), Doliphali, Vatera (Watera as per toposheet), Pipla (Pipela as per toposheet), Kharadoli
	Tehsil	Pindwara
	District	Sirohi
	State	Rajasthan
	Latitudes	24° 32' 47.3874"N to 24° 38' 33.7254"N
	Longitudes	72° 51' 57.958"E to 72° 57' 57.515"E
	SoI Topo sheet No.	45D/14, 15 & 45 H/2
Company's Name	Kamlesh Metacast Private Limited	
Accredited Co	Enkay Enviro Services Private Limited	

nsultant and c ertificate no.	NABET/EIA/23-26/RA 0326 validity till 14.12.2026
KML file	Uploaded
Seismic zone	Seismic Zone III, as per the seismic zoning map of India given in BIS code IS: 1893 (Part1)-2002.

2. Category details:

Category of the project	A
Schedule No.	1(a) Mining of minerals
Mining lease Area (MLA) (in ha.)	800.9935
General Conditions (if any)	None

3. Details of Mine Lease in chronological manner:

Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease a nd Lr No	<p>Prospecting License:</p> <p>Prospecting License (PL) for limestone over an area of 1859.0 275 ha near Village Rohida (Rohera as per toposheet) in Tehsil Pindwara, District Sirohi, Rajasthan granted vide Government Order no. Nikhabhu/ Sirohi/ CC.2/ P1 (2) 7/11/ 5255 dated 24-12-2014. PL executed on 12-03-2015.</p> <p>Letter of Intent (LoI):</p> <p>The LOI for an area of 800.9935 ha has been granted by Mines and Petroleum Department, Government of Rajasthan. LoI has been issued vide order no. P 3 (6) Khan/Group-2/2022 dated 1</p>
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	<p>3.03.2023. As per the condition of LoI, Mining plan has to be approved within 6 months and Environmental Clearance has to be obtained within 2 years.</p> <p>Upon request of KMPL and approval from GOR, approval timeline has been extended upto 12.03.2026 for EC and 12.09.2025 for mining plan vide order no. P.3 (6) Khan/Grp-2/2022 dated 25.07.2023 and P.3 (6) Khan/Grp-2/2022 dated 23.08.2024.</p>
Date of the grant	13.03.2023
Name of the Mineral & (Major/Minor)	Limestone (Major)
Period of Grant	Upto 12.09.2025 for mining plan and 12.03.2026 for EC
Granted by	Mines and Petroleum Department, Government of Rajasthan
Mine lease area in Ha	800.9935

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

Private land	551.9535 ha
Government land	227.9500 ha
Forest Land	Nil
Grazing /Charagah Land	21.0900 ha
Total Mining lease area (MLA)	800.9935 ha.
Private land for crusher, workshop & other infrastructure ou	Nil

tside the MLA

5. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	Letter no. E12030-MCDR-MP C0LST/28/2024-AJM-IBM_R O_AJM
	Date	27.11.2024
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	800.9935
	Validity	50 years validity from the date of lease registration and execution.
Mining Parameters	Quantitative Description	
Method of Mining	Open cast mechanized mining	
Drilling/Blasting	Wet drilling with sharp drill bits (Hydraulic, Hole Dia 150mm, hole depth 11 mtr hole) Controlled blasting by optimal charging of blast holes and use of delay detonator (NONEL) using ANFO as explosive. Use of hydraulic rock breaker to avoid secondary blasting.	
Geological Reserves	27,67,13,725.85 MT (276.71 Million Tonnes)	
Mineable Reserves	5,67,92,655.30 MT (56.79 Million Tonnes)	
Breakup of Total Excavation (Top	Limestone (Mineral) – 2.85 Million TPA, Mineral	

soil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Reject- 0.24, Soil – 0.04 Million TPA & OB – 5.7 8 Million TPA
Life of mine	20 years
Mine Bench Height & Bench Width	10 m & 15-20m
No. of Mine Benches	12
Existing Depth, m bgl	0
Ultimate Depth of Mining, m bgl	76
Ground Water Table, m bgl	60m bgl in Pre-monsoon and 55m bgl in Post monsoon
Details of ground water intersection	Mining will be carried out upto 250 MSL during the mining period. After 15 years for which CGWA NOC will be obtained for dewatering.
Individual bench slope	80°
Overall pit slope	≤45°
Details of existing/ proposed Crusher	Proposed: Crusher (1000 TPH) with wobbler and screening (200 TPH)
Mineral Beneficiation	Nil
RoM output size	1000 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	The Mineral will be transported to crusher located within applied ML area by Dumper/Trucks capacity 55 tonne

<p>Generation of Topsoil/OB & its Management during plan period & conceptual period</p>	<p>Plan Period:</p> <p>Top soil: 0.056 Million Tonne</p> <p>OB: 11.8452 Million Tonne</p> <p>Conceptual Period:</p> <p>Top Soil: 0.16 Million Tonne</p> <p>OB: 65.97 Million Tonne</p> <p>Top soil will be used for simultaneously for greenbelt/plantation development</p> <p>Ob will be used for backfilling of pit no-2 and rest will be stacked at earmarked dump site.</p>
<p>Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period</p>	<p>Plan Period:</p> <p>Mineral Reject: 0.7450 Million Tonne</p> <p>Conceptual Period:</p> <p>Mineral Reject: 4.94 Million Tonne</p> <p>Mineral reject will be stacked at earmarked dump site.</p>

6. Water requirement

<p>Total water requirement</p>	<p>Fresh water: 150 KLD</p> <p>10 KLD will be required for drinking and sanitation, 20 KLD Greenbelt development, 10 KLD mine workshop and 110 KLD for dust suppression</p>
	<p>Treated Water: 8 KLD</p> <p>HEMM washing water will be passed through Oil and grease separator. Treated water will be used for dust suppression at crusher.</p>

Source	Ground water
Permission for withdrawal/ inter section along with details of grant and its validity	Permission will be taken as per Rules & Regulation

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

Particulars	Particular's Name	Distance &Directions
Village	Taroongi (Tarangi as per Toposheet) & Bharja	Some village parts falls within the lease area
Town	Abu Road	9.82 Km. SW
Highway	NH-927A	Passing through the lease area
	NH-27	1.70 Km. NW
Interstate Boundary	None	None
Railway Station/ Railway line	Kivrali Railway Station	2.56 km in WSW
Water bodies	Hukli Nadi	8.89 km in NNE
	Silva Nala	5.54 km in E
	Kosiya Bhagra Nala	7.72 km in E
	Akhleti Nala	5.85 km in E

	Mandwara Distributary	3.36 km in E
	Khara Distributary	1.27 km in ESE
	Chitriya Nala	4.99 km in SE
	Sukli Nadi	Passing through the lease area
	Batriya Nadi	3.55 km in S
	Left Canal	1.52 km in E
	Banas River	2.37 km in WNW
	Gabir Nala	2.90 km in NW
	Right Canal	5.29 km in NW
	Grangri Bala	4.47 km in NNW
	Sangwara Minor	5.25 km in NW
	Sangbariya Balo	5.51 km in NW
	Sukli Nadi	5.24 km in NW
Forest	Nitaura Jor Reserved Forest	8.0 km in NW
	Reserved Forest N/V Swarupganj	2.97 in NW
	Reserved Forest N/V Pipela	2.08 in NW
	Protected Forest N/V Hirawala	0.56 in NE

	Reserved Forest N/V Wara	0.064 in S
	Reserved Forest N/V Wara	0.96 in SW
	Kivrali Ka Zor Reserved Forest	1.10 in W
	Mount Abu Wild Life Sanctuary	5.47 in NW
	Reserved Forest N/V Pipela	1.10 in NW

8. 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	PP has submitted non forest land certificate vide letter dated 02.02.2025 from the Office of Regional Forest Officer Pindwara, Sirohi
National Park	No	The NOC has been obtained from the DCF Sirohi vide letter no. F () Survey /DCF/2025/454, date 20.01.2025.
Wildlife Sanctuary	Mount Abu Wildlife Sanctuary (5.5 Km. NW)	
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)		PP has stated that the information will be submitted in EIA-EMP report.
Wildlife Conservation Plan		PP has stated that the information will be submitted in EIA/EMP Report.

9. Green belt/ Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	128.30 ha, 1,39,100 saplings
Budget for green plant & plantation till the end of life of mine.	792.82 lakhs
Budget for nursery	15 lakhs
Details of existing plantation and its survival rate	None
No. of tree cuts in the mine lease area and compensatory afforestation	250 and 1:10 as compensatory afforestation=2500
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	30.70

10. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	01/03/2023 to 31/05/2023
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Pre-monsoon

Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	8
Soil Quality (no. of locations) and results	8

11. Rehabilitation & Resettlement (R&R): This Proposal is for ToR

R & R details	R&R study will be covered during EIA study.
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12. Court case details:

Court Case, No and its present status	PP has stated that no litigation is pending.
Undertaking by Project Proponent w.r.t court case	PP has submitted an undertaking for no court cases vide letter dated 29.11.2024.

13. Affidavit/Undertaking details: This Proposal is for ToR

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit on 29.11.2024 as per the Ministry's OM dated 30.05.2018
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14. PP has submitted the following point-wise reply to the ADS raised during 38th EAC Meeting held on 27th D

S. No	ADS Point	Reply by Project Proponent
	The Project proponent needs to obtain necessary permission/NOC from State Water Resource Department to underta	The NOC is obtained from the Department of Water Resource, Sirohi vide letter no. 2024-25/5071 dated 03.01.2025.

	<p>ke mining activity on the banks of Sukli River passing through ML area.</p>	<p>The NOC is granted for mining (nearest pit no. 12 & 13) at a distance of 50 Mts from River Bank subjected to construction of retaining wall {rubble wall 3x2x2(m)} along the pit boundary towards the river to protect from any waste/siltation blocking the natural drainage channel. As per the NOC the mining area (pit no. 12 & 13) are not the part of River.</p>
	<p>PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same for examination by EAC. PP should provide an undertaking that no Mining will be conducted within the HFL (Highest Flood Level) of the Sukli River.</p>	<p>The Department of Water Resources Swaroopganj, has issued a letter dated 13.01.2025 stating that the UPL of pit no. 12 & 13 which are proposed at minimum distance of 50 Mts. from the River HFL and is not be affected by HFL in past 30 years.</p> <p>River HFL level is given as below:</p> <ol style="list-style-type: none"> 1. Pit no 12: river HFL is recorded as 318 MSL, while the pit UPL is 320 MSL. 2. Pit no 13: river HFL 318.5 MSL and Pit UPL 330 MSL.
	<p>Households, Schools and primary health care centers lying near to the proposed pit area shall be shifted within 2 years. No mining activity shall be permitted within 500 m of school and habitation. Accordingly, the Project Proponent needs to submit an action plan to expedite the shifting of habitation/school/health centre present within the ML area and also to safeguard them from adverse effect of mining operations</p>	<p>In this regard the letter received from the Office of DGMS, vide letter no. AJM/Directorate-1/2025/169 dated-20.01.2025 where danger zone is considered as 300 Mts. as per the Rule 164 (1-A) (b) of MMR 1961 and no blasting will be conducted within 300 mts. danger zone from any permanent surface structure without obtaining the DGMS permission.</p> <p>The letter also clarifies that, in case of school and habitation exist within danger zone of 300 mts., a prior scientific study is required to be submitted and approved from DGMS with maximum charge per</p>

		<p>r delay and other blasting parameters. As per the letter, Permission under Regulation 164(1-B) (a) of MMDR 1961, controlled deep hole blasting is granted up to 100 mts. distance from any school and habitation.</p> <p>However, in our case, during the 1st year working there is no mining activity undertaken and only haul road will be developed from pit no. 1 to crusher. (2.20 Km)</p> <p>During the 2nd year, mining will be initiated in pit no. 1 which will be located at distance of 470m away from the village Tarangi (Taroongi).</p> <p>Based on the 2nd year mining a scientific study will be carried out from the reputed credible institute for working within 300 Mts. and prior DGMS approval will be obtained for safe mining maintaining minimum distance from the sensitive locations.</p> <p>Working within the 300 Mts. blasting with NONEL technology (shock tube delay detonator), maximum charge per delay and other blasting parameters will be followed as per the approval.</p> <p>If there is any R&R the same will be mentioned in EIA/EMP Report</p>
	PP needs to revise the distance of its UPL from the proposed pits as per MMR	As per DGMS letter dated 20.01.2025 the danger zone is considered unto 300 mt

	<p>(Metalliferous Mining Regulations) /DGMS guidelines to ensure safety of Habitation/School and Primary Health Care Centers.</p>	<p>s. and accordingly no deep hole blasting will be conducted within Danger Zone from any permanent surface structure without obtaining the DGMS permission.</p> <p>As per the letter mining up to 50 Mts. distance from any sensitive location prior approval will be taken.</p> <p>Based on the 2nd year mining a scientific study will be carried out from the reputed institute for working within 300 Mts. and prior DGMS approval will be obtained for safe mining maintaining minimum distance from the sensitive locations to ensure safety of Habitation/School and Primary Health Care Centres.</p>
	<p>No river water shall be used in mining operations. PP shall submit an action plan to source water from nearby STPs as stated during the meeting instead of sourcing it from groundwater.</p>	<p>Total fresh water requirement will be 150 KLD out of which 10 KLD will be required for drinking and domestic and 140 KLD will be required for mining activities.</p> <p>Pursuant to the application made for willingness of treated w/w from STP at Santpur by RUID, a denial letter date-21.01.2025 has been received. Thus, we depending upon the ground water. For this application will be made to abstract ground water to the tune of 150 KLD on NOC AP of CGWA. The block is categorized as Semi-Critical and the permission of the same will be obtained. It is also mentioned that later as the pits develop, the ground water abstraction will be restricted only for drinking purpose only.</p>
	<p>PP needs to submit the proposed transportation route for transportation of mined out limestone till the cement plant is constructed.</p>	<p>We are in discussion with the Government of Rajasthan for finalization of location of the proposed cement plant. Land acquisition for cement plant will start after getting the final approval from Govern</p>

		<p>ment.</p> <p>After getting the EC for mining project, the total mining production in 1st two years will be 8383 tonne only which will be stacked near the crusher.</p> <p>From 3rd year onwards full mining production of 2.85 million TPA will be achieved which will be transported to the proposed cement plant site initially by road and later feasibility for installation of O LBC will be explored after the plant site finalization.</p>
	PP needs to submit the embankment design approved by State Government /Local Administration.	The design of proposed embankment/parapet wall along the pit no. 12 & 13 has been approved by the Water Resources Department Sirohi.
	PP needs to submit a NoC from DFO regarding mining operations near ESZ and wildlife sanctuary.	<p>The nearest distance from the ML boundary and Mount Abu Wildlife sanctuary is 5.5 km & the lease area is outside of the Mount Abu ESZ.</p> <p>The NOC has been obtained from the DCF Sirohi vide letter no. F () Survey /DCF/2025/454, DATE-20.01.2025.</p>
	PP needs to generate electricity by installing solar Power Plant and submit action plan to reduce diesel consumption by 30 %.	<p>A 10 KW solar panel will be installed at the roof of mine office to meet the power requirement for office and common areas. Power consumed by the crusher will be sourced from Grid where the green power consumption will be ensured under the PPA mode to align with India's Net Zero Commitment.</p> <p>The fuel conservation measures will be:</p> <p>Use of fuel-efficient equipment's</p> <p>Use of low sulphur content diesel or gre</p>

		<p>en fuel as available.</p> <p>The action plan for reduction of 30% diesel will be elaborated in the final EIA/EMP.</p>
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15. PP has submitted the following point-wise reply to the ADS was raised during 41st EAC Meeting held on 2

S. No	ADS Point	Reply by Project Proponent
	<p>In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should consult state DMG regarding location of mine lease inside/outside Aravalli Hills and range.</p>	<p>Acting on the query raised under this point, we have sought a letter from Office of DMG, wherein it is stated that</p> <p>The Hon'ble Court Order dated 09.05.2024 mentions that all Statutory approvals from Various Authorities can be obtained and the order does not cease any approvals for the same.</p> <p>The proposed project doesn't fall in the Aravalli Hills and also does not contempt the order dated 08.04.2005 of Hon'ble Supreme Court.</p> <p>The letter is issued in this regard from the Office of DMG Udaipur: vide letter no. 766 dated 26.03.2025.</p>
	<p>PP should obtain a letter/certificate from DCF Sirohi about forest land involved in the project, if any.</p>	<p>There is no forest land involved in proposed project has been endorsed in the letter issued from the office of regional forest office, Pindwara vide letter no. F()/Surve/ 2024-2025/105 dated 02.02.2025.</p>
	<p>PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same for examination</p>	<p>A letter pursuant to the EAC MOM posted, was requested from The Department of Water Resources, Sirohi. The letter no 58 dated 04/04/2025 states that "<i>The Sukli River is not a perennial river and there are no gauge plates and measuring device affixed to measure th</i></p>

	by EAC.	<i>e flow/flood level. So, they don't have record Flow/ Flood Level data for the Sukli River. The HFL level was calculated based on the maximum rainfall recorded in the catchment area over the past 30 years and with inputs from local senior person"</i> Based on this they have already provided the HFL level 318 m in the letter no 588 issued from, the office of Assistant Engineer water resource sub division, Sarupganj dated 13.01.2025.
	PP needs to provide the official name of the Sukri/ Sukli river as per Government record.	The above referred letter at point no. 3 clarifies the name as "Sukli River"
	PP needs to come out with an action plan to commission OLBC along with route survey plan.	<p>Action Plan to commission OLBC:</p> <p>We have signed a MOU with Govt of Rajasthan in the Investors Summit for allotment of land for setting up a cement plant.</p> <p>We have already requested the District Collector, Sirohi for allotment of land (copy submitted) and recently we have received the reply from Office of District Collector, ADM Sirohi, vide letter no 1519-20 dated 10.04.2025. The proposal is under process (copy submitted)</p> <p>We also submitted the google earth photo for proposed land and OLBC route plan from Crusher to cement plant for Length – 5.76 km and Width – 1.2 meter.</p>

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Air pollution control and management(dry fog system at crusher, crusher enclosures, bag dust collector at crusher, water sprinkler on haul roads)	0.87	0.10

Water and wastewater control and management (Garland drains, de-silting pits, septic tank & soak pits, oil and grease separation pits for HEEMS workshop, roof top rainwater harvesting and water meter)	0.50	0.05
Health and safety management (use of PPE's and primary health care & fencing)	0.10	0.010
Environmental monitoring (CAAQMS, Peizometer)	0.60	0.06
Plantation & Green Belt	7.93	0.25
Total	10.0	0.47

17. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	Total Cost of EMP will be given after PH. Capital Cost of EMP- 10 Cr.
Project Cost	203.526
Employment (No.s)	80

3.5.3. Deliberations by the committee in previous meetings

Date of EAC 1 :27/12/2024

Deliberations of EAC 1 :

The EAC deliberated the instant Terms of Reference proposal for Rohida Limestone Mine for mining of limestone with production capacity of 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, total excavation 8.91MTPA along with 1000 TPH of Crusher by M/s Kamlesh Meta Cast Private Limited mine lease area of 800.9935ha located in village(S) Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan.

The Project Proponent and the consultant presented the KML file and explained the key site features of the Mine lease and the study area. PP stated that Mount Abu Wildlife Sanctuary is located at a distance of 5.47 km in NW direction from the ML area and its ESZ is located at a distance of 4.47 km. PP mentioned that some part of village Tarangi and Bharja is lying within the ML area and village Watera is located at a distance of 50 m in the eastern direction. PP also added that Bharja to Wada Tar road passes through the ML area, NH-927A (Swaroopganj- Ratlam) road is also passing through ML area and NH-27 is located at a distance of 2.56 km in WSW direction. PP also stated that Sukli River is passing through ML area. EAC noted the submission of PP and enquired about the flow of sukli river. PP informed that it's a seasonal river and it merges with Banas river.

EAC noted the submission of PP and opined that ML area is having habitations, schools and primary health centre. Accordingly, EAC asked PP how it intends to mine since the habitation is spread out within ML area and the river is also traversing the mine lease.

PP stated that they will shift the habitation and will adhere to safety norms before starting the mining activity. EAC noted the proposed safety distance submitted by PP are not as per DGMS guidelines. It accordingly, advised PP to revise the safety distances as per the rules/guidelines of DGMS. EAC also noted the 15 pits proposed by PP and it observed that UPL of Pit 1 and Pit 2 is near to school/habitation and primary health centre. Accordingly, EAC directed to PP to revise the same.

EAC also observed that in the northern side of lease area the proposed pits appeared lying within the river bank and it accordingly asked PP to gather the HFL data and ensure that no mining activity is undertaken therein. EAC also advised PP to obtain NoC from State Water Resource Department for undertaking mining activity near the river.

With regard to the flow of water, PP informed that Sukli River receives water during monsoon season, the catchment area includes the water from adjacent higher grounds and hills through various naturally occurring depressions and nalahs.

EAC noted the submission of PP and asked PP where it intends to source its water, PP informed that it will require 150 KLD of water and it will seek CGWA permission to source the same from groundwater. EAC accordingly advised PP to look for alternate source of water and revise its requirement. PP submitted that it will source STP treated water to the tune of 110KLD.

Further EAC noted that some charagah land within the ML area and it accordingly asked PP to give a breakup of the same. PP submitted that out of total lease area of 800.9935 ha, 227 ha.9500 ha is govt waste land, 551.9535 ha is private agricultural land and 21.0900 ha is charagah land. EAC note the submission of PP and accordingly, asked PP to make alternate arrangement for charagah land.

Regarding transportation of mineral, PP submitted that they are going to construct a cement plant nearby ML area and in the mean time they are going to construct a bridge over the sukli river of 12 m width for transportation of mined out ore from pit no 15. EAC noted the submission of PP and asked PP to submit the proposed transportation route till the cement plant is installed.

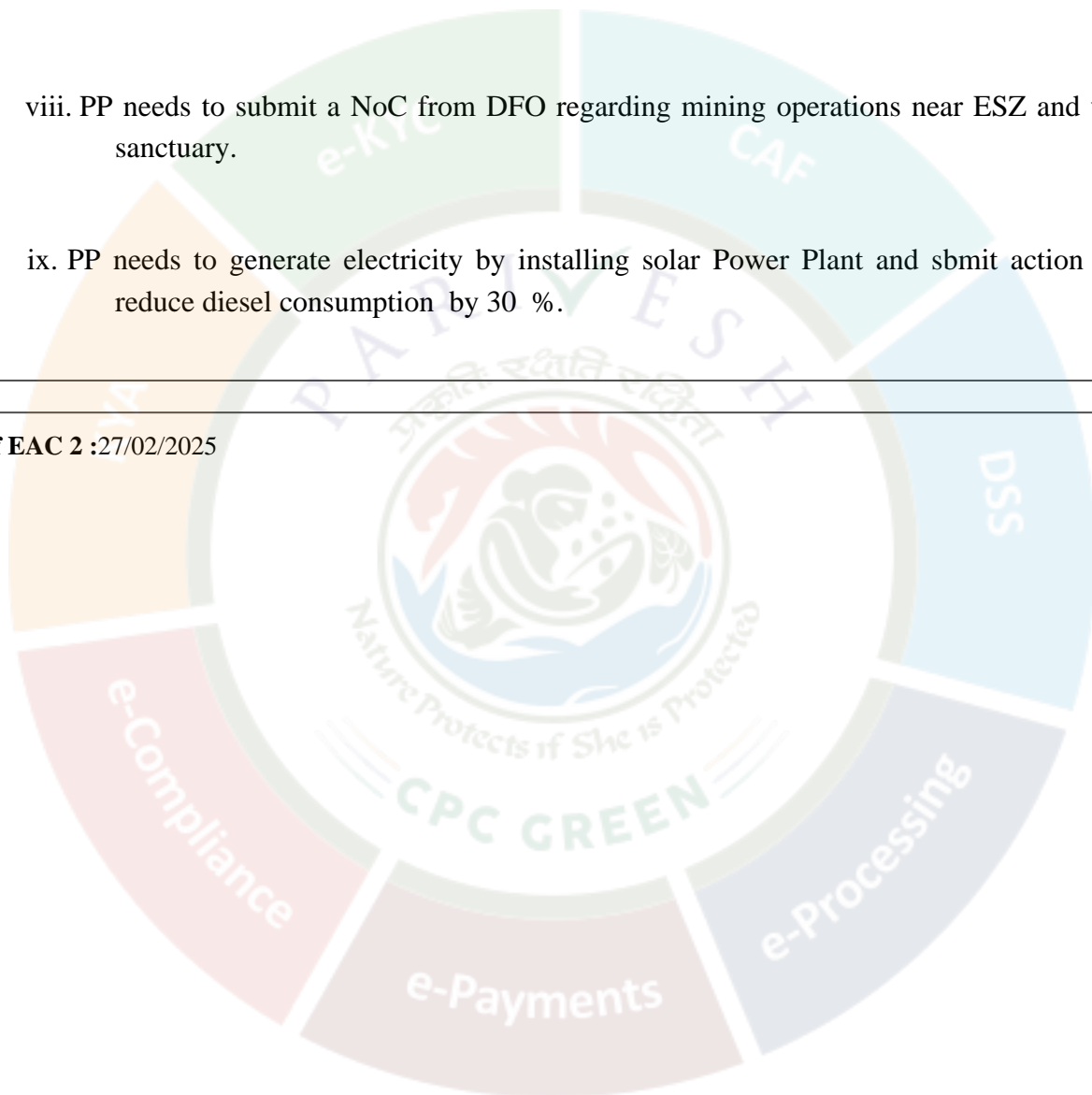
For mining near habitations EAC was of the opinion that PP should engage any institute of national repute to explore the implementation of surface miners.

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

- i. The Project proponent needs to obtain necessary permission/NOC from State Water Resource Department to undertake mining activity on the banks of sukli river passing through ML area.
- ii. PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same for examination by EAC. PP should provide an undertaking that no Mining will be conducted within the HFL (Highest Flood Level) of the Sukli River.
- iii. Households, Schools and primary health care centres lying near to the proposed pit area shall be shifted within 2 years. No mining activity shall be permitted within 500 m of school and habitation. Accordingly, the Project Proponent needs to submit an action plan to expedite the shifting of habitation/school/health centre present within the ML area and also to safeguard them from adverse effect of mining operations
- iv. PP needs to revise the distance of its UPL from the proposed pits as per MMR (Metalliferous Mining Regulations) /DGMS guidelines to ensure safety of Habitation/School and Primary Health Care Centres.

- v. No river water shall be used in mining operations. PP shall submit an action plan to source water from nearby STPs as stated during the meeting instead of sourcing it from groundwater.
- vi. PP needs to submit the proposed transportation route for transportation of mined out limestone till the cement plant is constructed.
- vii. PP needs to submit the embankment design approved by State Government /Local Administration.
- viii. PP needs to submit a NoC from DFO regarding mining operations near ESZ and wildlife sanctuary.
- ix. PP needs to generate electricity by installing solar Power Plant and submit action plan to reduce diesel consumption by 30 %.

Date of EAC 2 :27/02/2025



Deliberations of EAC 2 :

Observation and Recommendation of the Committee:

The EAC deliberated the instant Terms of Reference proposal for Rohida Limestone Mine for mining of limestone. Soil 0.04 MTPA & OB 5.78MTPA, total excavation 8.91MTPA along with the installation of 1000 TPH Crusher. The mine area is 800.9935ha located in village(S) Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sarohi.

The Project Proponent and the consultant presented the KML file and explained the key site features. Mount Abu Wildlife Sanctuary is located at a distance of 5.5 km in Eastern direction from the ML area and the lease area is outside ESZ.

PP also presented a letter dated 20.01.2025 issued by the office of the Deputy Conservator of Forest (DCF), Sarohi. Lease No. 1/2022 in Mauja Bharja, Tarungi, Watera, and Rohida Tehsil Pindwara District Sarohi was received through inspection was conducted by the Regional Forest Officer, Wildlife, Abutaleti, in the presence of the applicant's representative. Mount Abu Wildlife Sanctuary boundary. As per the above letter, the site lies outside the Eco-sensitive Zone. Further, Forest Division, a report from the Deputy Forest Conservator, Sirohi, is also needed.

As recommended by DCF Wildlife Abuparbat vide his letter dated 20.01.2025, PP shall obtain a certificate from the Forest Division, Sirohi.

PP mentioned that some part of village Tarangi and Bharja is lying within the ML area and village Watera. Bharja to Wada Tar road passes through the ML area, NH-927A (Swaroopganj- Ratlam) road is also passing through the ML area in the same direction. PP also stated that Sukli River is passing through ML area. EAC noted the submission of PP and enquired about the river. It merges with Banas River.

Thereafter, Project Proponent presented the reply to the ADS raised vide minutes of the 38th EAC meeting. The Project Proponent requested the State Water Resource Department to undertake mining activity on the banks of Sukri River passing through ML area. The Project Proponent requested the Department of Water Resource, Sirohi. In the said letter, it was mentioned an embankment is proposed by PP at a distance of 50 Mts. from the River HFL and is not be affected by HFL in past 30 years. PP also submitted HFL data of the Sukri River. PP informed that committee that Department of Water Resources Swaroopganj, has issued a letter dated 03.01.2025, proposed at minimum distance of 50 Mts. from the River HFL and is not be affected by HFL in past 30 years. PP also submitted pit UPL will be 320 MSL, similarly, River HFL near pit 13 is 318.5 MSL and pit UPL is 330 MSL. PP also submitted a letter dated 27.01.2025 to the Assistant Engineer. Beside above, PP also presented a letter dated 27.01.2025 that they have written to Additional Engineer, Sirohi. HFL data of Sukli River. PP also submitted an undertaking that they will not conduct any mining activity in HFL of Sukli River.

EAC noted the submission of PP and upon perusal of the KML, observed that starting point of calculation for HFL data for Sukli River to arrive at a decision that proposed pits are atleast 50 m beyond the existing HFL. EAC advised the State Water Resource Department letter 03.01.2025 , PP's presentation and in PP's undertaking . Thus, EAC advised the Project Proponent to record.

Regarding the location of proposed mine site, PP submitted that ML area is located outside the Aravalli range. PP Engineer, Sirohi stating that ML area is located outside the Aravalli Hills. EAC noted the submission of PP and following has been directed:-

“...Until further orders, though all the States in which Aravalli Ranges and Hills are situated would be at liberty to apply for renewal thereof including obtaining statutory clearances from the various authorities, no final permission shall be granted by this Court. Report dated 25.08.2010, without permission from this Court. Needless to state that this order in no way shall be construed as an order in accordance with the valid permits/licenses.”

In light of the Hon'ble Supreme Court's order dated 09.05.2024 EAC opined that PP should consult state DMG records.

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

1. In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should consult state DMG records.
2. PP should obtain a letter/certificate from DCF Sirohi about forest land involved in the project, if any.
3. PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same.
4. PP needs to provide the official name of the Sukri/Sukli river as per Government record.
5. PP needs to come out with an action plan to commission OLBC along with route survey plan.

3.5.4. Deliberations by the EAC in current meetings

The EAC deliberated the instant proposal for Reconsideration of Terms of Reference for Rohida Limestone Mine for mining of limestone with production capacity of 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, total excavation 8.91MTPA along with the installation of 1000 TPH Crusher by M/s Kamlesh Meta Cast Private Limited in mine lease area of 800.9935ha located in village(S) Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan.

The Project Proponent and the consultant presented the KML file and explained the key site features of the Mine lease and the study area. PP stated that Mount Abu Wildlife Sanctuary is located at a distance of 5.47 km in NW direction from the ML area and its ESZ is located at a distance of 4.47 km. PP mentioned that some part of village Tarangi and Bharja is lying within the ML area and village Watera is located at a distance of 50 m in the eastern direction. PP also added that Bharja to Wada Tar road passes through the ML area, NH-927A (Swaroopganj- Ratlam) road is also passing through ML area and NH-27 is located at a distance of 2.56 km in WSW direction. PP also stated that Sukli River is passing through ML and it merges with Banas River. EAC also noted the presence of habitations, schools and primary health centre within the ML area and asked PP about the proposed safeguards. PP stated that they will shift the habitation where necessary and will adhere to safety norms before starting the mining activity. EAC noted the proposed safety distance submitted by PP are not as per DGMS guidelines. It accordingly, advised PP to revise the safety distances as per the rules/guidelines of DGMS.

Thereafter, the Project Proponent presented the reply to the ADS raised vide minutes of the 41st EAC meeting held during 21.02.2025.

With regard to the involvement of any forest land within mine lease area, PP presented a letter dated 02.02.2025 issued by the Office of Regional Forest Officer Pindwara, Sirohi wherein it was mentioned that forest land is not present within the mine lease area.

Regarding HFL data for past 30 years and official name of the river, PP submitted a letter dated 04.04.2025 from the Office of Executive Engineer, Water Resource Department Sirohi, wherein it was stated that the name of the said river as per the record is 'SUKLI' and there are no gauge plates and measuring device affixed to measure the Flow/ Flood Level. Accordingly, no data is recorded. It has been further mentioned in the letter that the HFL level was calculated based on the maximum rainfall recorded in the catchment area over the past 30 years and with inputs from local senior person and same has been communicated earlier by the Assistant Engineer, Water Resource Sub Division, Swarupganj Office letter no 588 dated 13/01/2025.

EAC noted the submission of PP and reiterated that in absence of data, the benchmark of 318m HFL as provided vide letter dated 13.01.2025 and 04.04.2025 may be taken in account while proposing the mining activity at proposed pit no. 12 & 13. PP informed the committee that Department of Water Resources Swarupganj, has issued a letter dated 13.01.2025 stating that the UPL of pit no. 12 & 13 are proposed at minimum distance of 50 Mts. from the River HFL and is not be affected by HFL in past 30 years. PP also added that at pit no. 12, river HFL is recorded as 318 MSL whereas pit UPL will be 320 MSL, similarly, river HFL near pit 13 is 318.5 MSL and pit UPL is 330 MSL. PP also submitted a drawing (not in scale) showing Sukli riverbed and its HFL signed by Assistant Engineer.

EAC noted the submission of PP and highlighted that CPCB had earlier issued a distance criteria for permitting stone quarrying in reference to Hon'ble NGT order dated 28.02.2020 in the OA NO. 304/2019 which was later mandated by Hon'ble NGT vide order dated 21.07.2020.

EAC suggested PP to come out with alternate techniques for mining/excavation at proposed pit no. 12 & 13 areas close to River. EAC also suggested to explore the options of surface miners based upon the compressive strength and hardness of the ore.

Regarding action plan for installation of OLBC, PP submitted that they have identified a land for proposed cement plant and already have requested the State Government for its allotment vide letter dated 10.04.2025. PP also submitted the proposed route for OLBC installation. EAC noted the submission of PP and advised to submit the detailed OLBC installation plan at the time of EC application.

With regard to the Hon'ble Supreme Court's order dated 09.05.2024 and location of proposed ML area, PP submitted a letter dated 26.03.2025 from Office of Director-DMG, Udaipur stating that the aforesaid order mentions that all statutory approvals from various authorities can be obtained and the order does not cease any approval for the same. It is also mentioned that the ML area doesn't fall in the Aravalli Hills. EAC noted the submission of PP and asked to submit an undertaking in the form of an affidavit to comply with the directions of Hon'ble courts. Accordingly, PP vide email dated 24.04.2025 submitted an affidavit dated 22.04.2025 wherein PP has stated that they will abide by the final outcome of the Hon'ble Supreme Court in the matter of ongoing WP number 4677/1985 in relation to Aravalli Hills. PP has also submitted that they will abide by the outcome of the Hon'ble NGT order in the matter of ongoing OA No. 304/2019 with respect to revising the distance criteria by CPCB from lease to various sensitive areas. In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should regularly consult state DMG regarding location of mine lease inside/outside Aravalli Hills/range.

Based on aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 43rd EAC meeting held on 22-23 April, 2025, under the provisions of the EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal for the grant of Terms of Reference (ToR) for Rohida Limestone Mine of Kamlesh Meta Cast Private Limited with production capacity of 8.91 Million TPA Total Excavation (Limestone (Mineral) – 2.85 Million TPA, Mineral Reject- 0.24, Soil – 0.04 Million TPA & OB – 5.78 Million TPA) with proposed 1000 TPH of crusher over an area of 800.9935 ha located in Village(S) - Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil – Pindwara, District – Sirohi, Rajasthan. The recommendation is for undertaking a detailed EIA/EMP study and is subject to the following specific conditions, in addition to the standard ToR conditions applicable to Non-Coal mining projects: -

3.5.5. Recommendation of EAC

Recommended

3.5.6. Details of Terms of Reference

3.5.6.1. Specific

Specific Conditions	
1.	PP needs to submit the location of the proposed cement plan, route of transportation and timeline for completion of OLBC.

2.	PP needs to comply with the Hon'ble NGT's order dated 21.07.2020 in the OA No. 304/2019 and the recommendation of the CPCB report regarding distance criteria.
3.	PP shall comply with all the Judgement/ Orders of Hon'ble NGT in the OA No. 304/2019 in the matter of M.Haridasan & Ors. Applicant (s) versus State of Kerala & Ors. Reg.
4.	PP shall comply with all the Orders/ Judgement of Hon'ble Supreme Court, Hon'ble Court, Hon'ble NGT or any court of Law in the matter of Aravalli Hills/ Range.
5.	PP needs to engage any national institute of repute to explore the comprehensive strength of the limestone ore and feasibility of deploying surface miners.
6.	PP needs to submit the complete design and timeline for completion of the embankment near Pit no. 12 and 13. Consultation with DGMS should be done with respect to safety aspects of embankment.
7.	PP shall plan so that that the UPL of the proposed pit nos 12 & 13 shall always remain above the HFL of Sukli River to ensure zero ingress of river water. Consultation with DGMS should be done in this regard.
8.	PP needs to submit the data regarding the loss of water flow in Sukli River due to change in catchment area owing to the proposed mining activity. PP also needs to provide an action plan to compensate for the water loss to the farmers that are dependent on the water of Sukli River for irrigation.
9.	PP needs to submit the water quality data for the upstream and downstream of the river. PP shall ensure that there are no adverse effects on Sukli River due to the proposed mining activity. Scientific study should be conducted to know the possible adverse impacts on Sukli River from Mining operations, blasting etc.
10.	The natural water bodies and or streams which are flowing in and around the mine lease area should not be disturbed. PP shall consult state Water Resource department and SPCB regarding safeguards for River/Nallah and submit an action plan for protection of the same.
11.	Households, Primary Health Care Centres (PHC) & Schools lying near to the proposed pit area shall be planned to shifted within 2 years. No mining activity shall be permitted within 500 m of schools and habitations. Accordingly, the Project Proponent needs to submit an action plan to expedite the shifting of habitation present within the ML area and also to safeguard them from adverse effect of mining operations.
12.	PP to engage a reputable national institute for conducting both blasting and vibration studies and to carry out a scientific assessment of air overpressure and fly rock distances following blasting.
13.	Appropriate Higher capacity machinery to be planned to be used within the ML area in order to reduce the pollution. Accordingly, PP needs to submit an action plan.
14.	PP needs to reduce diesel consumption by proposing to deploy electric driven vehicles in the project.
15.	PP should ensure that all the documents including the approved Mining plan and EIA/EMP should be in consonance with each other.
1	The Project Proponent should submit an action plan to construct a water reservoirs within the mine

6.	lease area so that reliance on outside water is lessened/ eliminated.
1 7.	The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
1 8.	PP should engage national reputed institute for scientific diversion studies. PP should consult State Water Resource Department for conservation, safeguards regarding the Nadis natural waterbodies, streams, rivers, etc. in and near the project area. If required, NoC from Water Resource Department should be taken for the above water bodies, streams.
1 9.	PP needs to plan for the construction of ponds, water storage or collection structures, and other rainwater harvesting systems to address the water levels and requirements of the area effectively.
2 0.	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.
2 1.	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.
2 2.	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.
2 3.	The Project Proponent needs to prepare plan to develop the treatment facility for waste water within the ML area. STP should also be planned.
2 4.	The Project Proponent can explore for establishment of nursery on 5 hectares, in collaboration with a reputable forest institute, to cultivate local species such as Khejri, Rohida, Senegalia senegal (commonly known as Khair, Kumththa, Babul) etc.
2 5.	The Project Proponent needs to furnish details of waste material handling plan and year wise back filling plan.
2 6.	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. Accordingly, PP shall prepare a wildlife Conservation Plan as per Wildlife Amendment Act 2022 and shall submit a proof of submission of the plan to State Forest Department.
2 7.	The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, and predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
2 8.	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.
2 9.	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.
30.	The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the number of trees to be cut in the mine lease area and to explore the possibility of tree transplantation.
31.	The Project Proponent needs to prepare the installation plan for permanent fixed water sprinkling system along the Haul roads.
32.	The Project Proponent needs to plan for developing the Renewable energy facility within the ML area and incorporation of electric vehicle in order to reduce the dependency upon the diesel.
33.	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 of number of saplings (at least 2500/ha) 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.
34.	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.
35.	PP needs to conduct the drone survey of the ML area and submit the same at the time of EC application.
36.	PP needs to submit an action plan for installation of ETP with Oil & Grease trap within the ML Area.
37.	PP needs to undertake the carrying capacity of the proposed road that is to be utilized for transportation of minerals till the installation of OLBC.
38.	PP needs to submit an action plan as per Ministry's OM dated 24.07.2024.
39.	The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF)/Project Displaced Families (PDF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. PP need to submit the plan for Socio economic development of the neighborhood habitats based on the need based survey along with the time bound action plan. PP also needs to submit the possession certificate and timeline for acquiring the land. Further, PP needs to submit the map demarcating the purchased land and non-purchased land if any at the time of appraisal of EC.
40.	The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.
41.	PP needs to submit an action plan regarding safeguarding or diversion of river, Natural streams in and around the lease area, in consultation with State Water Resources Department.
42.	PP needs to look after the alternate Charagah land area. PP should submit a detailed action plan to provide an alternate charagah land.

4 3.	PP needs to come out with the plan for the crusher installation.
4 4.	PP needs to project year wise backfilling plan.
4 5.	A slope stability study should be conducted through national institute of repute and incorporated into the EIA report. PP may also explore whether <i>study of seismic impact on the ecology and environment</i> of the area is required through the above institute.
4 6.	The PP shall ensure compliance of MoEFCC O.M. dated 14.01.2025 regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024.
4 7.	PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign “EK Ped Ma ke Naam” () and the details of the same shall be uploaded in the Meri Life portal (https://merilife.nic.in).

3.5.6.2. Standard

1(a)	Mining of minerals
null	
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994
2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee
4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone)
5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics
6.	Details about the land proposed for mining activities should be givenwith information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority
7.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large,may also be detailed in the EIA Report

8.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided
9.	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period
10.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given
11.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given
12.	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees
13.	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished
14.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated
15.	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
16.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted
17.	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished
18.	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost
19.	Proximity to Areas declared as Critically Polluted or the Project areas likely to come under the Aravali Range, (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
20.	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned

	Coastal Zone Management Authority)
2 1.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report
2 2.	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site- specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given
2 3.	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map
2 4.	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated
2 5.	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
2 6.	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided
2 7.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided
2 8.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
2 9.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out
3 0.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same
3 1.	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution

3 2.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines
3 3.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
3 4.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report
3 5.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed
3 6.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations
3 7.	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation
3 8.	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project
3 9.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project
4 0.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
4 1.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
4 2.	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
4 3.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc
4 4.	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the

	circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area
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Day 2 -23/04/2025

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Belkundi Iron & Manganese Ore Mine by THE ORISSA MINERALS DEVELOPMENT COMPANY LIMITED located at KENDUJHAR,ODISHA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/497426/2024	23-204/2018-IA.III(V)	20/09/2024	Mining of minerals (1(a))

3.1.2. Project Salient Features

The instant proposal is for Environmental Clearance (Under Violation category, Ministry's notification S.O. 804(E) dated the 14th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:

1. Project details:

Name of the Proposal	The instant proposal is for Environmental Clearance (Under Violation category, Ministry's notification S.O. 804(E) dated the 14 th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha	
Location	Village	Belkundi, Nalda, Karakolha, Karakhendra, Uliburu, Barbil-7&8 & Uliburu RF

	Tehsil/Taluka	Barbil
	District	Keonjhar
	State / UT	Odisha
	Latitudes	22°07'41.520"N to 22°09'45.231" N
	Longitudes	85°23'03.481" E to 85°26'05.619" E
	SoI Topo sheet No.	73F/8
Company's Name	The Orissa Minerals Development Company Limited	
Accredited Consultant and certificate no. and Validity	NABET Approved * Validity Date 11.06.2027	
KML file	Yes	
Seismic zone	Seismic Zone- II	

2. Category details:

Category of the project	A
Schedule No.	1(a)
Mining lease Area (MLA) (in ha.)	1276.79
General Conditions (if any)	NA

3. ToR/EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
05.09.2017	J-11015/23-204/2018-IA III (V)	Yes	Approved by EAC	29.05.2020

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of accord
20.09.2024	IA/OR/MIN/497426/2024	Yes	Fresh	-

4. 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.
	Mining Lease		Iron ore	01.01.1941 15.08.1956	State Government of Odisha	7.723 SQ Miles
	1st renewal of Mining Lease	11.05.1961	Iron & manganese ore	16.08.1956- 15.08.1986	State Government of Odisha	1276.79 Ha
	2nd renewal of Mining Lease	12.11.2002	Iron & manganese ore	16.08.1986- 15.08.2006	State Government of Odisha	1276.79 Ha.

	Mining Lease period extension as Rule MMDR 2015.	03.02.2020	Iron & manganese ore	16.08.2006 to 15.08.2026	State Government of Odisha	1276.79 Ha.
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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		
	Original	01.01.1941	15.08.1956	Iron ore	7.723SQ Miles
	1st renewal	16.08.1956	15.08.1986	Iron & Manganese ore	1276.79
	2nd renewal	16.08.1986	15.08.2006	Iron & Manganese ore	1276.79
	Mining Lease period extension as Rule MMDR 2015.	16.08.2006	15.08.2026	Iron & Manganese ore	1276.79

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

Private land	580.883 Ha.
Government land	
Forest land	695.907 Ha. (Including SABIK Forest)
Total Mining lease area (MLA), ha.	1276.790 Ha.
Private land for crusher, workshop & other infrastructure	NA

outside the ML Area

6. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/ DMG)	Letter No.	RMP/A/43-ORI/BHU/2020-21/2668
	Date	29.01.2021
	Mineral & (Major/ Minor)	Iron & manganese ore (Major)
	Mine Lease Area, Ha	1276.79
	Validity	31.03.2026
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining	
Drilling/Blasting	Yes	
Geological Reserves in Million Ton	Iron ore - 28.596 MTPA Manganese Ore - 13.985 MTPA	
Mineable Reserves in Million Ton Production (2025-26)	Iron ore - 24.625 MTPA Manganese Ore - 11.183 MTPA Iron 1.8 Million Tonnes per annum. Mn 0.3 Million Tonnes per annum	
Top Soil (2025-26)	Nil	

Overburden (2025-26)	Iron: 139600 MT, Mn: 44400 MT
Life of mine	Iron ore 14 years, Manganese ore 37 years
Mine Bench Height & Bench Width	Height/ width of the benches will be kept at 9m/ 12 m in iron ore zone and 6m/ 10m in manganese ore zone respectively.
No. of Mine Benches	05 Nos.
Existing Depth, m bgl	25 m bgl
Ultimate Depth of Mining, m bgl	35m bgl
Ground Water Table, m bgl	65m bgl
Details of ground water intersection	NO
Individual bench slope	(65-70) Degree
Overall pit slope	45°
Details of existing/ proposed Crusher	Proposed crusher = 2 nos. capacity 200 TPH and 100 TPH Proposed screen plant=2 nos. capacity 400 TPH and 200TPH
Mineral Beneficiation	No
RoM output size	-300mm
Transportation details including capacity of dumper/tipper, mode of	Dumper/tipper 25 Tones

f transport and distance	
Generation of Topsoil/OB & its Management during plan period & conceptual period	NIL
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Waste will be dumped in the non-mineralised earmarked area as per approved mining plan & will be utilized for back-filling of mined out area.

7. Water requirement:

Total water requirement	200 KLD	Fresh water	200 KLD
		Treated water	NIL
Source	Proposed Bore well & Surface water (Nalda Pond of M/s OMD C Ltd)		
Permission for withdrawal/ intersection along with details of grant and its validity	NOC Obtained vide letter no. CGWA/NOC/MIN/ORIG/2021/10964, Valid Upto 15/02/2025. Permission granted for 80 KLD of ground water from CGWA and balance 120 KLD of surface water will be drawn from Nalda Pond of M/s. OMDC Ltd. Renewal is under process.		

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

Particulars	Particular's Name	Distance & Directions
Village	Belkundi, Nalda, Karakolha, Karakhendra, Uliburu, Barbil 7 & 8& Uliburu R.F	Within and adjoining villages
Town	Barbil	3.0 kms
Highway	NH 215	8.30 Kms in South

Interstate Boundary	Adjoining to ML area	0 km																												
Railway Station/ Railway line	Barbil R.S.	3.0 Kms. SSW direction.																												
Water Bodies	Nalda Pond	In ML area																												
Forest	<table><tr><th>S. No</th><th>Name</th><th>Distance (Km.)</th><th>Direction</th></tr><tr><td>1</td><td>Nuia PF</td><td>~ 3.5</td><td>N</td></tr><tr><td>2</td><td>Ghatkuri PF</td><td>~ 3.0</td><td>NW</td></tr><tr><td>3</td><td>Noamundi PF</td><td>~ 3.0 &</td><td>E</td></tr><tr><td>4</td><td>Siddhamath R F</td><td>~ 10.0</td><td>S</td></tr><tr><td>5</td><td>Pandrasali PF</td><td>~ 4.0</td><td>E</td></tr><tr><td>6</td><td>Tatiba PF</td><td>~ 4.5</td><td>W</td></tr></table>		S. No	Name	Distance (Km.)	Direction	1	Nuia PF	~ 3.5	N	2	Ghatkuri PF	~ 3.0	NW	3	Noamundi PF	~ 3.0 &	E	4	Siddhamath R F	~ 10.0	S	5	Pandrasali PF	~ 4.0	E	6	Tatiba PF	~ 4.5	W
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	6	Tatiba PF	~ 4.5	W																										

9. 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 Department concerned mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	695.907 ha (Including SABIK Forest), MoEF&CC, Govt. of India vide letter dated 14.09.2022 had granted coterminous extension of Forest Clearance over an area of 384.54 ha with extended mining lease period i.e. up to 15.08.2026.
National Park	NO	The PP has submitted an authenticated map of

Wildlife Sanctuary	NO	Odisha Showing Distance Of 1276.790 Ha Belkundi Mines in Thakurani Reserve Forest Under Keonjhar Forest Division Of M/s Orissa Mineral Development Company Limited Under Barbil Tahasil, District Keonjhar Odisha from National Parks/ Sanctuaries/ Elephant /Tiger Reserve Biosphere Reserve Elephant Corridors and Ramsar Sites.
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	Elephant & Sloth Bear, Memo No - 4074/CWLW-FDWC-FD-0108-2024 dated 04 th April 2025.
Wildlife Conservation Plan	Yes	PP has obtained the certificate from Chief Conservator of Forest (WL-II) vide letter dated 04.04.2025.

10. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	421.34 ha, Sampling Nos. 6,20,310
Budget for green plant & plantation till the end of life of mine.	Rs. 100 lakhs & 33 % plantations will be developed.
Budget for nursery	NIL
Details of existing plantation and its survival rate	23.40 Ha & 23,400 Nos. & 80 % Survival rate
No. of tree cuts in the mine lease area and compensatory afforestation	268.827 Ha. of CA land
Particulars for Green belt/plantation	Area covered (in Ha)

n	
7.5 m barrier & non-mineralized zone	11.412 Ha (ML Boundary)
50 m safety zone of nallah, roads, electric lines	120.513 Ha (50m along the water course, 10m along village road, 50m along state highway & 50m along Railway line)
500 m safety zones of nearest habitation villages	NA

11. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	1 st October to 31 st December 2019 & Re-validation in October 2022
Season (Summer/Pre-monsoon/Post-monsoon/ Winter)	Post Monsoon
Predominant Wind direction (From)	NW
Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	SW 2 & GW 5
Soil Quality (no. of locations) and results	7

Hydro geological study and results	Yes
Traffic study (no. of locations) and results	1

12. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	22.07.2024, The Times of India & Dharti
Date of PH	11:00 AM on 17.08.2024
Venue	Mouza - Barbi, Unit -7
Chaired by	ADM – Sri. Jadumani Mahala, ADM, Keonjhar RO – Er. Prasanta Kar, RO, SPCB, Keonjhar
Main issues raised during PH	Demanded Employment to locals and Concern about environment related to local environment.
Budget proposed for addressing issues raised during PH over 3 years	50 lakhs capital and 5 lakhs recurring.

13. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the project

Particulars	Details of Letter along with date of grant and validity
Consent to Establish	PP has obtained CTE vide letter no. 21645-IND-I I-NOC-3878, dated 25.08.2006

Consent to Operate	PP has obtained revised consent order no. 20788/ I ND-I-CON-179, dated 19.12.2009, consent order no 397, and the valid upto 31.03.2011
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14. Rehabilitation & Resettlement (R&R):

R & R details	A study got conducted by M/s Shubhadra Consultant and report was prepared and submitted to Revenue and Disaster Management Dept., Govt. of Odisha. In response of this, a letter vide no. RDM-RRC-POLICY-0002-2023-9422/R&DM dated 14.03.2023 stating that “the land has not been acquired under L.A. Act, 1894 or RFCTLAR&R Act, 2013. Also, there is no displacement/ loss of livelihood in the project area. It is a study report and does not contain any R&R plan. So, it does not require approval by Revenue & DM”.
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15. Court case details:

Court Case, No and its present status	A case in District Court JMFC Court, Barbil, and Odisha with Case no. 2(C).C.C. case No. 114/2013 dated 31.07.2013 is under process and outcome is awaited. Last hearing date is 03.10.2024.
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16. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The project proponent has submitted an Affidavit as per Ministry's OM dated 30.05.2018 bearing no. N687657 dated 26.09.2024.
Undertaking by Project Proponent in EIA/EMP report	The project proponent has submitted an undertaking vide affidavit no. N687657 dated 26.09.2024 with EIAEMP report.
Undertaking by Consultant in EIA/EMP report	EIA Consultant-Wolkem India Limited has submitted an undertaking with the EIA-EMP report.
Plagiarism Certificate	PP has submitted a software generated plagiarism certificate vide letter dated 20.09.2024

17. PP has submitted point-wise reply vide letter dated 09.04.2025 against the ADS raised during 34th EAC meeting

S. No.	ADS Point	Reply by PP								
1	The Project Proponent must submit either the Stage-I Forest Clearance (FC) for the remaining forest area or a restrictive mining plan for the already diverted forest land (384.54 ha), for which Stage-II FC is available, and the non-forest land (580.883 ha).	Mining plan (restricting over the already diverted forest land and the non-forest land) is approved by IBM vide No. RMP-2351/2024-25-IBM_RO_BBS dated 08.04.2025 with validity till 31.03.2026.								
2	The Project Proponent is required to submit the site-specific wildlife conservation plan along with proof of its submission to the Forest Department.	The Site-Specific Wildlife Conservation Plan has been approved vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04 th April 2025.								
3	The Project Proponent must upload the complete Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) report on the Parivesh Portal.	Complete EIA & EMP report along with all relevant Annexures is uploaded on Parivesh Portal.								
4	The Project Proponent needs to submit an action plan to ensure that more than 70% of the ore is transported through the railway siding, with the remaining 30% transported by road.	<p>The suggestion of the Hon'ble Committee is noted and management of OMDC Limited will try to incorporate the same by adopting the following activities:</p> <p><u>For Railway Siding</u></p> <ul style="list-style-type: none">· The possibility of 70% ore transportation through railway siding will be explored and implemented after obtaining requisite approval from railways.· Details of railway siding available within 10 km radius are as below: <table><tr><th>S. N</th><th>Railway Siding</th><th>Distance Kms.)</th><th>Direction</th></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	S. N	Railway Siding	Distance Kms.)	Direction				
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5	The Project Proponent should provide an action plan for the construction of rain water harvesting facilities	<ul style="list-style-type: none">· Project proponent is conscious towards the use of natural resources and planning to use groundwater for drinking and domestic purposes only in future operations.· For mining and associated operations, rainwater																																

within the lease area.

r stored on the mine pit will be used.
· However, till the validity of present NOC of C
GWA, groundwater will be used initially as
the company has already paid the abstractio
n charges.

Measures For Rainwater Harvesting

Proposed depth of working and groundwater levels indicate that there is no possibility of puncture of ground water table in plan period and seepage/accumulation of ground water on the quarry floor. The source of water in the mine are:

(a) Rainfall / direct precipitated water and

(b) Surface run-off water from the adjacent pit top area at higher levels around the pit/ quarry. However, the quantity of water likely to be encountered in the pit is estimated below:

Description	Quantity
Pit area at the end of plan period	160.528 ha / 1,605,280m ²
Adjacent pit top area (assuming 10% of pit area)	= 160,528m ²
Total catchment area	1,605,280 + 160,528 = 1,765,808m ²
Annual rainfall	1503mm or 1.503m
Quantity of rainfall	1,765,808 x 1.503 = 2,654,010m ³
Rainwater likely to be evapo-transpired (assuming 50% of total rainfall)	2,654,010 x 50% = 1,327,005m ³
Rainwater is likely to seep into the sub-surface (assuming 20% of total rainfall)	2,654,010 x 20% = 530,802m ³
Rainwater likely to be accumulated in the pit (the remaining 30% of total rainfall)	2,654,010 x 30% = 796,203m ³

Annual rainfall, catchments area and likely quantity of rainwater to flow through the lease area: Average annual rainfall is 1503.3 mm. The south-west monsoon lasts from mid-June to mid-September and the area receives more than 70% to 80% of the annual rainfall during the period. Likely quantity of rainwater to flow through the lease area has been calculated as follows:

Description	Quantitative Aspects
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M.L area	= 1276.790 ha
Quarry as well as surrounding area	= 1,765,808m ² or 176.581 ha
Remaining area in the M.L area	= 1276.790 + 176.581 = 1453.371 ha / 14,533,710m ²
Annual rainfall	1503.3mm or 1.503m
Quantity of rainfall	14,533,710m ² x 1.503m = 21,844,166m ³
Rainwater is likely to be evapo-transpired (assuming 50% of total rainfall)	21,844,166 x 50% = 10,922,083m ³
Rainwater is likely to seep into sub-surface (assuming 20% total rainfall)	21,844,166 x 20% = 4,368,833m ³
Rainwater is likely to flow in the lease area (remaining 30% total rainfall)	21,844,166 x 30% = 6,553,250m ³

Arrangement for arresting solid wash off: Protective measures like retaining wall, garland drain and settling tank will be built up around the lower level of waste dumps to arrest the wash-off materials and release clean water. Boulders of waste materials will be utilized for construction of retaining walls. Sand and cement will be used for the binding of the boulders. Garland drains will be developed around waste dump beyond the retaining wall to receive run-off water coming out of the retaining wall and settling tank will be made en-route to receive the run-off water from garland drain to settle the sediments and release clean water. Details of the construction/ arrangement and maintenance around waste dumps for arresting solid wash-offs in the plan period will be as follows:

Year	Location	Retaining wall (m)			Garland drain (m)			Settling tank (m)		
		L	W	H	L	W	D	L	W	D
1 st (2025-26)	Dump-ID/1	350	1	1.5	350	1	1	10	5	3
	Dump-MD/1	325	1	1.5	325	1	1	10	5	3
	Dump-MD/2	250	1	1.5	250	1	1	10	5	3
2 nd (2026-27)	Dump-ID/1	350	1	1.5	350	1	1	---	---	---
	Dump-MD/1	325	1	1.5	325	1	1	---	---	---
	Dump-MD/2	250	1	1.5	250	1	1	---	---	---

Balance Period	Dumps as above	Maintenance	Maintenance	Maintenance
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The retaining wall will be repaired/ maintained, and garland drain as well as settling tank will be cleaned/ de-silted throughout the plan period as and when necessitated preferably just after the monsoon seasons.

6	The Project Proponent is required to revise the budget for the proposed remediation plan and the natural and community resource augmentation plan, taking into account the damages to the receptors.	As suggested by the Hon'ble Committee, the Remediation Plan and Natural and Community Resource Augmentation Plan has been revised considering the receptors i.e. affected due to mineral transportation from mine lease to dispatch point. Now, after revision, the total cost is Rs. 4, 81, 41,000/-.
7	The budget for plantation of 6, 20,310 trees over 400 ha needs to be submitted with timeline for plantation. The proposed amount of Rs. 7.5 lakh for plantation under EMP is not adequate given the types of plants selected. Accordingly, PP needs to submit the revised budget.	The Plantation programme with respect to timeline and cost of plantation has been revised.

Year	Location	Area (Ha.)	No. of plants	Cost of plantation (INR)	Species
Existing Plantation	Lease boundary, Mined out area & Reclaimed area	23.40	23,400	--	Karanja (Pongamia Glabra),
2025-26	Safety Zone +	14.50	10,000	25,00,000	Simaria (Bursera simaruba),
2026-27	Available open area	57.13	44,945	1,12,36,250	Neem (Azadirachta),
Till Conceptual Stage	Safety Zone + Dumps + Other available areas	326.31	5,41,965	13,54,91,250	Sumarua (Samanea saman) Chhatian (Alstoniaschol

					aris) Mango (Mangifera indica), Kadamba (Neolamprolaima Cor ekiacadamba) etc.
Total		421.34		14,92,27,500	

xviii. Project Proponent has submitted the following revised Budget for Proposed Remediation Plan & Natural and Community Resource Augmentation Plan:

a. Revised Proposed Remediation Plan and Natural & Community Resource Augmentation Plan (NCRAP):

i. Remediation Plan & Budgetary Provisions (revised):

S. No.	Particulars	Remediation Budget (INR)
1.	Land Environment	Plantation = Rs. 42,16,000/-
2.	Air Environment	Air Monitoring = Rs. 15,00,000/-
3.	Water Environment	Rainwater Harvesting & Construction of septic tank & soak pit = Rs. 10,00,000
4.	Noise Environment	Earplugs for labour= Rs. 7,50,000
5.	Biological Environment	Plantation and green belt development inside premises= Rs. 22,50,000
6.	Socio-Economic Environment	Solar Light – Rs. 7,50,000
Total		Rs. 1,04,66,000/-

· Revised Remediation Plan and Budgetary Provisions with Timeline:

S. No.	Particulars	Remediation Budget (INR)	Total budget (INR)

		1st year	2nd year	3rd year	
1.	Land Environment	14,05,334	14,05,334	14,05,334	42,16,000
	<p>Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces.</p> <p>Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc.</p> <p>Approx. 1800 Plants Per Year</p> <p>Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi 1-7, Barbil-8.</p>				
	<p>Location: Water sprinkling at approach Road from Mine to 500 m distance towards villages/ habitation with frequency of daily basis.</p> <p>Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi 1-7, Barbil-8.</p>				
2.	Air Environment (Monitoring)	5,00,000	5,00,000	5,00,000	15,00,000
	<p>Air Monitoring: Proposed at 8 locations on a quarterly basis frequency.</p> <p>Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi 1-7, Barbil-8, Barajamda, Murgabehra.</p>				
3.	Water Environment	4,00,000	3,00,000	3,00,000	10,00,000
	<p>Rainwater Harvesting: RWH and Construction of septic tank & soak pits.</p> <p>Total No. of RWH = 2 Buildings Per Year</p> <p>Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi 1-7, Barbil-8, Barajamda, Murgabehra.</p>				

4.	Noise Environment	2,50,000	2,50,000	2,50,000	7,50,000
	<p>Noise Monitoring: Noise Monitoring proposed at 6 locations near ML Boundary on a quarterly basis and Earbuds/ earplugs for workers safety.</p> <p>Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi l-7.</p>				
	<p>Vibration Monitoring: At Six locations around Mine Lease within 500 m locations of Lease periphery.</p> <p>Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi l-7, Barbil-8.</p>				
5.	Biological Environment	7,50,000	7,50,000	7,50,000	22,50,000
	<p>Flora - Plantation (as per schedule) and green belt development in inside premises.</p> <p>Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces.</p> <p>Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc.</p> <p>Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbi l-7, Barbil-8.</p>				
	<p>Fauna - Conservation of schedule-I species in the study area.)</p> <p>As per approved site-specific wildlife conservation plan vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04th April 2025.</p>				
6.	Socio-Economic Environment	2,50,000	2,50,000	2,50,000	7,50,000
	<p>(Solar lights = Total 10 nos. per year @ Rs. 25,000/- with pole)</p> <p>Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu.</p>				

Total				1,04,66,000/-
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Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 10, 46,600/

ii. Natural Resource Augmentation Plan:

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
1.	<p>Avenue Plantation (2500 m)</p> <p>500 plants with tree guards on each side of the road (1000 plants x Rs. 750 each) and its maintenance till self-sustenance (1000 x 100)</p> <p>Locations: Nalda, Karakhendra, Belkundi, Karakolha</p>	<p>7,50,000</p> <p>1,00,000</p>	<p>7,50,000</p> <p>1,00,000</p>	<p>7,50,000</p> <p>1,00,000</p>	<p>22,50,000</p> <p>3,00,000</p>
Sub-total		8,50,000	8,50,000	8,50,000	25,50,000
2.	<p>Installation of Rainwater harvesting at 15 buildings per year in nearby Govt. Schools/ Hospitals/ Panchayats/ Community Centers/ Other premises in study area/ Keonjhar district. (45 nos.)</p> <p>(unit price approx. 2,00,000/-)</p> <p>Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.</p>	30,00,000	30,00,000	30,00,000	90,00,000

3.	Recharge Ponds for groundwater recharge in 15 structures every year with minimum dimensions of 5x4x3 m = 60 Cu.m each (45 nos.) (unit price approx. 1,40,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	21,00,000	21,00,000	21,00,000	63,00,000
	Total				1,78,50,000
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 17, 85,000/-					
iii. Community Resource Augmentation Plan:					
S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1.	RO with water cooler at 25 Govt. Schools/ Hospitals/ Panchayats/ each year (Total 75 nos. in 3 yrs) (unit price approx. 25,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	6,25,000	6,25,000	6,25,000	18,75,000

2.	Distribution of 20 Computer every year in Govt. School (Total 60 nos. in 3 yrs) (unit price approx. 45,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	9,00,000	9,00,000	9,00,000	27,00,000
3.	Goat farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 1,00,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	10,00,000	10,00,000	10,00,000	30,00,000
4.	Poultry farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karak	5,00,000	5,00,000	5,00,000	15,00,000

	olha, Uliburu, Barbil-7, Barbil-8.				
5.	Mushroom farming training and financial assistance to 5 farmers every year (Total 15 nos. in 3 yrs) (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	1,00,000	1,00,000	1,00,000	3,00,000
6.	Sewing machine distribution to local female for financial stability & income generation at least 20 every year (Total 60 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,00,000	2,00,000	2,00,000	6,00,000
7.	Installation of Solar Panels in Govt. Schools, Hospitals, Panchayats in the Study Area 25 nos. of buildings	20,00,000	20,00,000	20,00,000	60,00,000

	g every year (Total 75 nos. in 3 yrs) (unit price approx. 80,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
8.	Skill development programmes for young people with a target of 25 people every year (Total 75 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,50,000	2,50,000	2,50,000	7,50,000
9.	Supply of Agriculture water pumps for locals on need based and promotion of sprinkling and drip irrigation for 10 nos. every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi,	5,00,000	5,00,000	5,00,000	15,00,000

	Karakolha, Uliburu, Barbil-7, Barbil-8.				
10.	Awareness program for reduction of plastic waste reduction/ solid waste management in 10 villages every year (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,00,000	2,00,000	2,00,000	6,00,000
	Total				1,88,25,000
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 18,82,500/-					
<p>A. Economic Benefit derived due to violation:</p> <p>Saving interest on the cost of environmental protection measures and other activities is approximately Rs. 10,00,000 to be spent for medical camp organisation for locations/ providing medical equipment on need based to local Primary Health Center/ Hospitals at Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.</p> <p>Recurring cost considered @10% of the total cost. Hence, it is Rs. 1,00,000/-.</p> <p>B. Total budget for Remediation, Natural & Community Resource Augmentation Plan and Economic Benefit:</p>					
S. No.	Particulars	Proposed Capital Budget (INR)	Proposed Recurring Budget (INR)		
1.	Remediation Plan	1,04,66,000/-	10,46,600		

2.	Natural Resource Augmentation Plan	1,78,50,000	1,78,50,00
3.	Community Resource Augmentation Plan	1,88,25,000	1,88,25,00
4.	Economic Benefit Derived due to violation	10,00,000	10,00,00
Total		INR 4,81,41,000/-	4,81,41,00

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

Activities	Capital cost (Lakhs)	Recurring cost (Lakhs/annum)
Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)	40	4.0
Pollution Monitoring (Air, soil, Water, Noise) including CAAQMS installation at mine site	110	11.0
Occupational Health & Safety	10	2.5
Green Belt Development	10	5.0
Miscellaneous (Fencing, protection, regeneration and maintenance of safety zone)	30	2.
Public Hearing Action Plan	50	5
Total	250	30

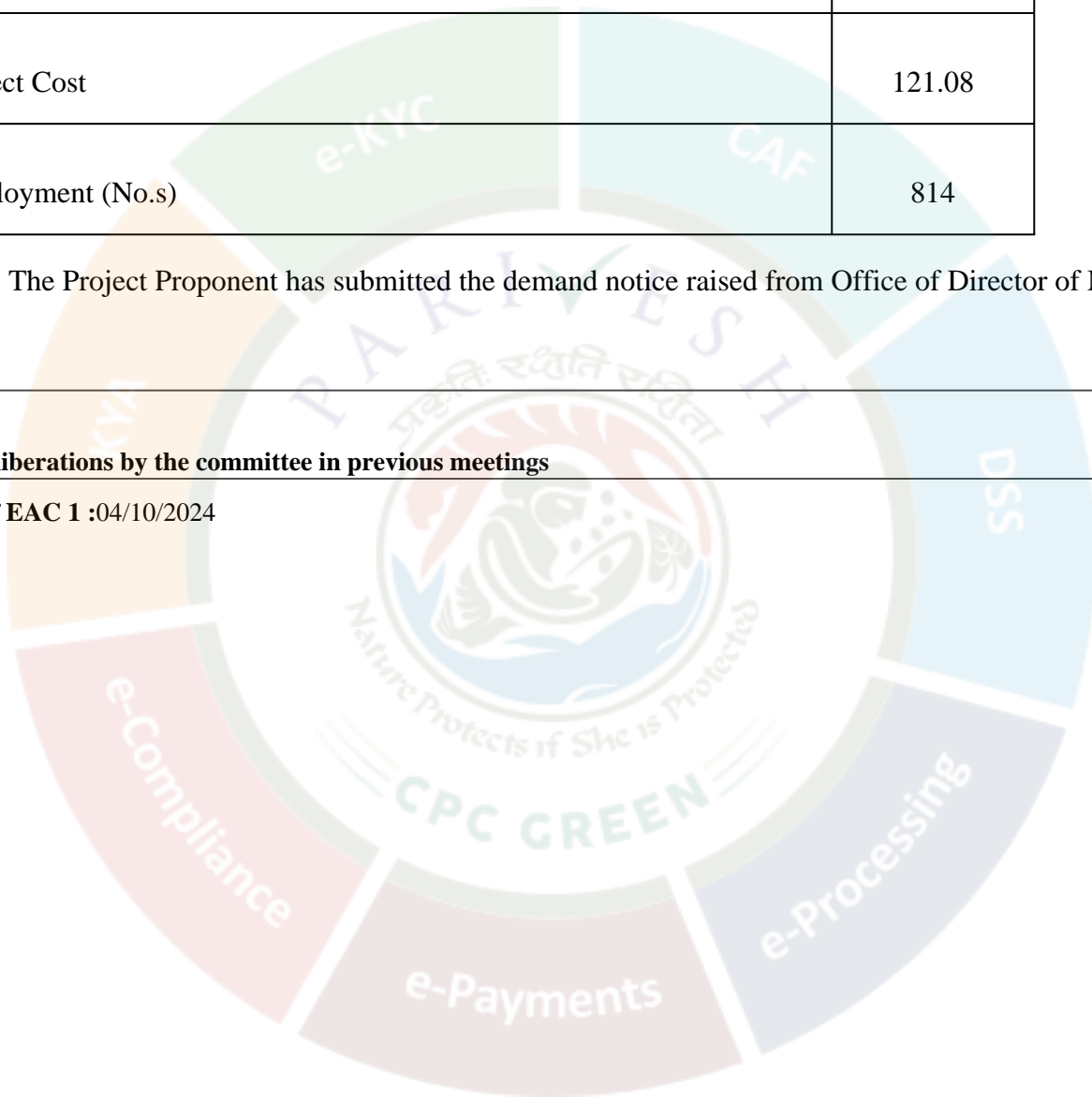
20. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	2.5
Project Cost	121.08
Employment (No.s)	814

21. The Project Proponent has submitted the demand notice raised from Office of Director of Mines, Joda Circle

3.1.3. Deliberations by the committee in previous meetings

Date of EAC 1 :04/10/2024



Deliberations of EAC 1 :

The Project Proponent and the consultant presented the KML file and explained the site's features to the committee. The Project Proponent indicated that Nalda Pond is located within the Mining Lease (ML) area, and the nearest village, Barbil, is situated approximately 3 km from the lease area. Additionally, the Proponent noted that State Highway SH-10B runs through the lease area. The total lease area of the Belkundi Mines, operated by M/s Orissa Minerals Development Company Ltd, is 1,276.79 hectares. Of this, 580.883 hectares consist of private land, while the remaining 695.907 hectares is classified as forest land. The Project Proponent stated that they have obtained Forest Clearance (FC) Stage II for 384.54 hectares of the forest land, as per the Ministry's letter dated 14 September 2022, and they will conduct mining activities within this diverted forest area.

The Project Proponent further indicated that, in compliance with the Supreme Court order dated 02 August 2017 in CWP No. 114/2014, the DDM Joda issued a demand notice (No. 4090/Mines) dated 02 September 2017, and the Project Proponent has deposited a sum of ₹109,75,65,363. The Proponent also stated that a case for credible action under the Environment Protection Act (EP Act) of 1986 has been registered in the District JMFC Court, Barbil, Odisha, with Case No. 2(C).C.C. No. 114/2013 dated 31 July 2013, which is currently under process, and the outcome is awaited.

Additionally, the Project Proponent mentioned that they have obtained approval for the Review of the Mining Plan from the Indian Bureau of Mines (IBM), Bhubaneswar, via letter No. RMP/A/43-ORI/BHU/2020-21 dated 29 January 2021. The Expert Appraisal Committee (EAC) acknowledged the submissions made by the Proponent and recommended that they revise the mining plan to include a restrictive mining plan for the already diverted forest land and private land, or alternatively, submit the Stage-I Forest Clearance (FC) for the remaining forest land.

The Expert Appraisal Committee (EAC) also inquired about the transportation route and requested that the Project Proponent submit an action plan to maximize ore transportation via the railway siding. The Proponent indicated that obtaining railway rakes is challenging. The EAC advised the Proponent to coordinate with the Railway Department and provide an action plan regarding this matter.

Additionally, the Proponent presented the damage assessment prepared in accordance with the Ministry's notification S.O. 804(E) dated 14 March 2017. The Committee acknowledged the Proponent's submission and recommended that they revise the budget to account for the damages to the receptors. Furthermore, the EAC requested the consultant to submit the site-specific wildlife conservation plan on the Parivesh Portal, along with proof of submission to the Forest Department.

After detailed deliberation by the Project Proponent and the Consultant, the EAC **deferred** the proposal for want of the following information:-

- i. The Project Proponent must submit either the Stage-I Forest Clearance (FC) for the remaining forest area or a restrictive mining plan for the already diverted forest land (384.54 ha), for which Stage-II FC is available, and the non forest land (580.883 ha).
- ii. The Project Proponent is required to submit the site-specific wildlife conservation plan along with proof of its submission to the Forest Department.
- iii. The Project Proponent must upload the complete Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) report on the Parivesh Portal.
- iv. The Project Proponent needs to submit an action plan to ensure that more than 70% of the ore is transported through the railway siding, with the remaining 30% transported by road.
- v. The Project Proponent should provide an action plan for the construction of rainwater harvesting facilities within the lease area.
- vi. The Project Proponent is required to revise the budget for the proposed remediation plan and the natural and community resource augmentation plan, taking into account the damages to the receptors.
- vii. The budget for plantation of 620310 trees over 400 ha needs to be submitted with timeline for plantation. The proposed amount of Rs. 7.5 lakh for plantation under EMP is not adequate given the types of plants selected. Accordingly, PP needs to submit the revised budget.

3.1.4. Deliberations by the EAC in current meetings

EAC deliberated on the Instant proposal for Environmental Clearance (Violation category, under Ministry's notification S.O. 804(E) dated 14th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79 Ha by M/s Orissa Mineral Development Company Ltd located at Villages

Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

The project is classified under Category "A" and falls under Activity 1(a) of the schedule of the EIA Notification, 2006.

The Project Proponent and the consultant presented the KML file and explained the site's features to the committee. Within and adjoining villages include Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Barbil Unit-7 & 8 and Uliburu R.F. The nearest railway station is Barajamda situated at 0.25 km and Barbil is situated about 3.0 km to the south-southwest (SSW) of the site. The Committee asked the Project Proponent to establish and try to operationalise Railway Siding in the ML area. From the kml file submitted by PP it appears that some portions of the ML area lies in Jharkhand State. PP must clarify about the same.

PP stated that State Highway SH-10B passes through the lease area, while National Highway NH-215 is located 8.3 km to the south. It was also stated that Nalda Pond lies within the Mining Lease (ML) area. The Project Proponent confirmed that there are no National Parks, Wildlife Sanctuaries, or Tiger/Elephant Reserves within 10 km radius of the project site. A total of Six Protected Forests (PFs) is present within the study area. The approved Site-Specific Wildlife Conservation Plan has been submitted vide letter dated 04.04.2025.

The lease was executed from 01.01.1941 to 15.08.1956. First lease renewal was done from 16.08.1956 to 15.08.1986 for 30 years and executed in favor of M/s OMDC. Subsequently, second lease renewal was done for a period of 20 years with effect from 16.08.1986 to 15.08.2006. Application for third renewal was made on 12.08.2005 as per Rule 24(A) (1) of Mineral Concession Rule, 1960. State Government of Odisha issued letter vide no. III (A) SM-04/2010/1072/SM, Bhubaneswar dated 03.02.2020 stating the validity of mine lease, extended till 15.08.2026 in favor of M/s OMDC Ltd.

The total lease area of the Belkundi Mines, operated by M/s Orissa Minerals Development Company Ltd, is 1,276.79 ha. Of this, 580.883 hectares consist of private land, while the remaining 695.907 hectares is classified as forest land. The Project Proponent stated that they have obtained Forest Clearance (FC) Stage II for 384.54ha of forest land, as per the Ministry's letter dated 14th September 2022. The Project Proponent will conduct mining activities within this diverted forest area.

The Modification of Review of Mining Plan, along with the Progressive Mine Closure Plan, was approved on 29.01.2021 and is valid till 31.03.2026. The Expert Appraisal Committee (EAC) acknowledged the submissions of the Mining plan (restricting over already diverted forest land and the non-forest land) approved by IBM vide No. RMP-2351/2024-25-IBM_RO_BBS dated 08.04.2025 with validity till 31.03.2026. The Modification of Review of Mining Plan is submitted under Rule 17(3) of MCR, 2016 for One (1) Year Of 2025-26 To Comply One of the Conditions for Restriction of the Working in Already Diverted Forest Land Area over 384.54 Ha for Which Stage-II FC Is available and Non-forest Land over 580.883 Ha. The existing depth of mining is 25 m bgl. The groundwater table in the area is at a depth of 65m bgl and Ultimate mine working depth will be 35m bgl. Therefore, the mining operations will not intersect the water table.

The total water requirement is 200 KLD (Fresh water), proposed to be met through Bore well & Surface water (Nalda Pond of M/s OMDC Ltd). Out of 200 KLD, 120 KLD will be drawn from Nalda Pond of OMDC for meeting the mine's requirements for Dust Suppression (80KLD) & Green Belt Development (40KLD). The rest 80 KLD of water will be drawn from 02 nos. of bore wells for which NOC from CGWA has been obtained and was valid upto 15/02/2025. As per PP application for renewal

of permission is currently under process.

The Project Proponent has planned a greenbelt/plantation covering a total area of 421.34 ha. A total of 6,20,310 saplings will be planted, with an estimated expenditure of Rs. 100 lakhs and 33 % plantations will be developed.

Baseline data was collected during the post-monsoon season (1st October to 31st December 2019 & Re-validated in October 2022), with the predominant wind direction observed from NW. Studies conducted included Ambient Air Quality, Noise Levels, Water Quality, Soil Quality, Hydrogeological Study and Traffic Study.

PP submitted that public hearing was held on 17.08.2024, under the chairmanship of ADM, Keonjhar and RO, SPCB, Keonjhar. PP presented that they have earmarked a budget of Rs. 90 lakhs under public hearing action plan. EAC noted the submission of PP and advised to make the action plan monitorable.

Regarding transportation, the Committee asked to explore the increasing the capacity of trucks for transporting minerals from Mine site to the nearest Railway siding. Committee also asked to obtain permissions for separate rakes from the officials of Railway for this particular mine.

It was also observed that a seasonal Nallah enters from the eastern side flows across the western lease boundary which dissects the lease area into northern and southern parts, which is a tributary of Karo River. The Committee also asked to submit HFL data of the nallah from the State officials of Odisha.

During the discussions, the Committee also observed that the few industries, sponge iron plant, pellet plant are located within the ML area. PP informed that these industries are operational and transportation to and fro the above industry occurs through the mine lease area. Accordingly, EAC asked the Project Proponent to obtain the clarification for the same from State DMG.

Thereafter, PP presented the Remediation Plan & Natural and Community Resource Augmentation Plan. EAC noted the submission of the PP and observed that plan is neither tangible nor monitorable. Accordingly, EAC advised PP to revise the same.

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

1. PP needs to submit the Monitorable and Tangible Environmental Management plan excluding the budget and
2. PP needs to submit the Monitorable and Tangible Public Hearing action plan.
3. PP needs to submit the Monitorable and Tangible Remediation Plan & Natural and Community Resource Augmentation Plan
4. PP needs to submit a copy of the certificate from State Forest Department regarding the presence of National

5. The Project Proponent needs to consult Railway Department to obtain permissions for separate railway rake
6. The Project Proponent needs to consult Stated Water Resource Department with respect to the nallah present
7. The Project Proponent needs to obtain a clarification from the State DMG regarding the presence of sponge
8. PP also needs to submit the details of the area within the ML for which it has already obtained surface right
9. The Project Proponent needs to submit detailed information regarding the geological reserves and mineable
10. PP needs to submit communication with Indian Bureau of Mines regarding reserve and production plans in
11. PP needs to inform DGMS regarding sponge iron and pellet plant within the lease area and transportation o
12. In the EIA-EMP report, PP should include the impacts of sponge iron plant, pellet plant in the lease area on
13. PP needs to submit the authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Ac
14. PP needs to submit the copy of approved wildlife conservation plan as per the Wildlife (Protection) Amend
15. PP must clarify about the portions of ML area that appears lying in the Jharkhand State, as per KML file s

3.1.5. Recommendation of EAC

Deferred for ADS

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Expansion in Narayanposhi Iron & Manganese Ore Mine [ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)] with Iron Ore (ROM 10 MTPA & OB 4.216 MTPA) Total Excavation 14.216 MTPA & with Manganese Ore (ROM 0.036 MTPA & OB 0.223 MTPA) Total Excavation 0.259 MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate at Sundargarh, Odisha by JSW STEEL LTD located at SUNDARGARH, ODISHA			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/OR/MIN/482860/2024	J-11015/62/2020-IA.II(M)	24/09/2024	Mining of minerals (1(a))

3.2.2. Project Salient Features

The instant proposal is for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216 MTPA & existing capacity of Manganese Ore (ROM) 0.036 MTPA & OB 0.223 MTPA with total Excavation 0.259 MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:

- The mine lease area is located between Latitude 21°54'46.07" N to 21°56'23.13" N Longitude 85°13'41.16" E to 85°14'56.56" E. The mine lease area falls under the Survey of India Toposheet No. Core Zone F45N1 (73G/1), F45N5 (73G/5) and Buffer zone: F45N1 (73G/1), F45N5 (73G/5), F45H8 (73F/8), F45H4 (73F/4) and falls in Seismic Zone-II.
- The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2 (b) for Mineral Beneficiation falls under Category "A" as the mining lease area is greater than 250 ha and appraised at the Central level.
- The Project Proponent has obtained the ToR vide letter no.J-11015/62/2020-IA.II (M) dated 31.12.2020 and subsequent amendment vide letter no. J-11015/62/2020-IA.II (M) dated 18.02.2022.

iv. Details of Mine Lease:

S. No.	Prospecting License/ Letter of Intent (LoI)/ Grant of Mi	Date of the grant	Name of the Miner and l&	Period of Grant	Granted by	Mine lease area in Ha
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	ne lease and Letter No.		(Major/ Minor)			
1.	Issuance of Letter of Intent in favor of JSW Steel Ltd. vide letter no. 2288/S&M/IV(Misc) SM-66/2016(Pt-I)	02.03.2020	Iron & Manganese Ore	03 years	Govt. of Odisha	
2	Issuance of Vesting Order in favor of JSW Steel Ltd. vide letter no. 4212/SM IV (B) SM-21/2020	30.05.2020	Iron & Manganese Ore	2 years	Govt. of Odisha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
3	Permanent Vesting Order was issued in favour of JSW Steel Ltd.	15.02.2022	Iron & Manganese Ore	-	-	

S. No.	Details of grant of Mine Lease decided execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	Mine Lease was granted & executed in favor of M/s. JSW Steel Ltd.	26.06.2020	25.06.2070	Iron & Manganese Ore	ML Area 347.008 Ha (As per DGPS) / 349.254 Ha (As per ROR)
2.	Mine Lease was registered in favor of M/s. JSW Steel Ltd.	27.06.2020	26.06.2070	Iron & Manganese Ore	

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

Private land	4.687 ha
Government land	55.648 ha
Forest land	257.451 Ha
Total Mining lease area (MLA), ha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
Private land for crusher, workshop & other infrastructure outside the MLA	All the activities proposed within mine lease
Additional information (if any)	29.222 ha is ST Land

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	MPM/A/08-ORI/BHU/ 2021- 22/742
	Date	05.08.2021
	Mineral & (Major/ Minor)	Major
	Mine Lease Area, Ha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
	Validity	2021-22 to 2024-25
Additional information (if any)	Mining Plan along with Progressive Mine Closure Plan was Approved by IBM, Bhubaneswar vide letter no. MP/A/14-ORI/BHU/2020-21/994, dated 08.09.2020.	

	Modification of Mining Plan along with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines (IBM), Bhubaneswar vide Letter No. MPM/A/08-ORI/BHU/2021-22/742, dated 05.08.2021 for Iron & Manganese Ore over an area of 347.008 Ha (As per DGPS)/ 349.254 Ha (as per ROR) for the period 2021-22 to 2024-25 in favor of JSW Steel Ltd.										
Mining Parameters	Quantitative Description										
Method of Mining	Opencast Fully Mechanized Method with Crushing, Screening, CPU and Beneficiation Plant (Proposed)										
Drilling/Blasting	<table><tr><th>Parameter</th><th>Description</th></tr><tr><td>Bench Height</td><td>9m for Iron Ore Zone 6m for Manganese Ore Zone</td></tr><tr><td>Bench Width</td><td>23m for Iron Ore Zone 15m for Manganese Ore Zone</td></tr><tr><td>Depth of Blast hole</td><td>9.9m for Iron Ore Zone 6.1m for Manganese Ore Zone</td></tr><tr><td>Burden</td><td>3m for Iron Ore Zone</td></tr></table>	Parameter	Description	Bench Height	9m for Iron Ore Zone 6m for Manganese Ore Zone	Bench Width	23m for Iron Ore Zone 15m for Manganese Ore Zone	Depth of Blast hole	9.9m for Iron Ore Zone 6.1m for Manganese Ore Zone	Burden	3m for Iron Ore Zone
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Hole diamo ter	150/115m for Iron Or e Zone 32m for M anganese Ore Zone								
Powd er Fac tor	7 Tonne/K g								
Geological Reserves	181.036 Million Tonnes Iron ore and 0.538 Million Tonnes Manganese Ore								
Mineable Reserves	164.79 Million Tonnes Iron ore and 0.508 Million Tonnes Manganese Ore								
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Iron Ore (ROM: 10 Million TPA & OB: 4.216 Million TPA), Total Excavation: 14.216 Million TPA and Manganese Ore (ROM: 0.036 MTPA & OB: 0.223 MTPA), Total Excavation: 0.259 Million TPA								
Life of mine	17 years for Iron Ore and 14 Years for Manganese Ore.								
Mine Bench Height & Bench Width	Bench Height: 9m (Iron Ore Zone); 6m (Manganese Ore Zone)								

	Bench Width: 10-12m (Iron Ore Zone); 15m (Manganese Ore Zone)
No. of Mine Benches	9 Nos. in Quarry-3/4 12 Nos. in RF Pit 6 Nos. in Mn Quarry-5
Existing Depth, m bgl	The existing bottom RL in: 507 m
Ultimate Depth of Mining, m bgl	405 m
Ground Water Table, m bgl	Likely depth of water table is of 5 m (at RL545 m) general surface level (at RL550 m) in rainy season and 8m (at RL542 m) in dry season. Mn Quarry-5 has touched the ground water at 540m RL.
Details of ground water intersection	Yes (Mn Quarry-5 has touched the ground water at 540m RL)
Individual bench slope	450 OB 850 Quarry-3/4, RF Pit and Mn Quarry-5
Overall pit slope	37.50 for Iron Ore zone and 310 for Manganese Ore zone
Details of existing/ proposed Crusher	Existing: Stationary crushing & screening plant: 1 x 350 TPH, Mobile crushing & screening plant: 1 x 150 TPH & 1 x 100 TPH, Mobile screening plant: 3 x 200 TPH, 4 x 150 TPH, 2 x 100 TPH, Mobile revolving screening plants- 1 x 10 TPH Proposed: Mobile Crushing & Screening Plant: (400 TPH x 10 & 250 TPH x 07), initially & same will be phased out after Central Processing Unit (CPU): 2000 TPH is complete

	missioned
Mineral Beneficiation	Proposed: 6.0 Million TPA Grinding & Beneficiation Plant
RoM output size	- 10 mm Iron Ore +10-75 mm (58%) and + 6-10 mm (42%) Manganese ore
Transportation details including capacity of dumper/tipper, mode of transport and distance	Dumpers are being/will be used for ore transportation from mine to ore processing area, waste transportation to dump area and processed ore transportation from ore processing area to stacking yard. Initially the iron ore will be sent to JSW plants and other end users through Road/ Railway/ Sea-ways. After commissioning of Grinding & Beneficiation Plant, it will be processed and transported through slurry Pipeline/ Road/ Railway/ Pipe Conveyor.
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>There is no top soil cover in the Iron Ore mineable area. The top soil cover from the Mn working quarry will be scrapped and stacked at the earmarked site. Total waste generation during plan period from the iron ore zone will be 64, 81,289 cum and 4, 41,971 cum from manganese ore zone. At conceptual stage from the Iron, ore zone will be 34, 20,341 cum and 7, 80,834 cum from manganese ore zone.</p> <p>OB is being & will be used for the backfilling of excavated area.</p>
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	<p>Iron ore with <45% Fe (laterite, shale, BHJ/BHQ) and manganese ore processing generate significant waste, including 30% from beneficiation, 78% intercalated waste, and 10% Mineral Rejects, temporarily stored for future use.</p> <p>During Plan period from Iron ore zone; 85, 00,000 cum and from Mn ore 14,400 cum Mineral Reject will be gener</p>

	<p>ated.</p> <p>At conceptual stage, from Iron ore zone: 1, 38, 04,020 cum and from Mn ore 1, 00,107 cum Mineral Reject will be generated.</p>
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vii. Water requirement

Total water requirement	13,632 m ³ /day	Fresh water	980 KLD (GW) + 1102 KLD (Dewatering)+ 11550 KLD (SW)
		Treated water (Domestic)	70 KLD (treated through STP capacity 80 KLD)
Source	Surface water, ground water sources, rain water harvesting pond, borewell and from manganese pit		
Permission for withdrawal/intersection along with details of grant and its validity	<p>Renewal of NOC from CGWA for Ground water withdrawal (980KLD) & for dewatering (1102KLD) was obtained, vide NOC No. CGWA/NOC/MIN/REN/2/2024 /10057 was obtained dated 17.10.2024 and valid till 18.01.2026.</p> <p>Permission regarding surface water withdrawal for 4,000 m³/hr (96,000 m³/day) has been obtained by the Department of Water Resources, Odisha dated 28.11.2023.</p>		
Additional information (if any)	<p>Total water requirement will be 553cum/hr for beneficiation/ Grinding & Slurry Pumping. Further, for domestic consumption it has been planned to utilise ~15 cum/hr of water. Therefore, total water requirement will be 568m³/hr (13,632 m³/day) and will be met from surface water, ground water sources, rainwater-harvesting pond, borewell and from manganese pit.</p>		

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

Particular	Particular's Name	Distance & Directions
Village	Village Kashira	~0.3 km in East Direction
Town/City	Barbil	~26 km in NE direction
Highway	NH-215 (Earlier known as NH-520)	Passing through ML Area
Interstate Boundary	Odisha – Jharkhand	~ 8.9 km in North direction
Railway Station/ Railway line	Barsuan	~15.2 km in SW direction
Water Bodies	Karo Nadi	Adjacent in NW direction and at some places overlapped to mine lease
	Suna Nadi	~6.7 km in East direction
	Orahari Nallah	Adjacent to ML boundary in SW direction
	Kashira Nallah	Flowing through ML Area
	Narayanposhi Nallah	Flowing through ML Area
	Samij Nallah	~3.8 km in NW direction
	Kalta Nallah	~4.0 km in NNW direction
	Teherei Nallah	~5.7 km in ESE direction
	Kalmang Nallah	~6.3 km in ENE direction

	Erua Nallah	~6.7 km in WNW direction
	Gera Nallah	~7.8 km in West direction
	Topadihi Nallah	~8.0 km in NE direction
	Khajurdihi Nallah	~8.0 km in SE direction
	Geria Nallah	~8.8 km in WSW direction
Forest	No Protected Forest within 10km radius.	
	Kathamala RF	within ML area
	Mendhamaruni RF	~1.0 km in East direction
	Karo RF	~1.3 km in North direction
	Tortha RF	~1.5 km in NW direction
	Reserved Forest	~2.8 km in South direction
	Sarakanda RF	~5.0 km in South direction
	Uliburu RF	~6.4 km in North direction
	Khajurdihi RF	~7.2 km in SSE direction
	Tholkabad RF	~7.8 km in North direction
	Karampada RF	~8.7 km in North direction
	Lakrhaghat RF	~8.7 km in NE direction

Siddhamath RF

~9.3 km in ENE direction

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 Letter 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 (Stage-II) for diversion of 244.327 ha including 184.591 ha of virgin land vide letter no. F. No.8-34/2000-FC (Vol-I) dated 15.11.2007 and vested to JSW · FC (Stage II) transferred to JSW for 238.201 ha forestland vide No. FE-DIV-FLD-0067-2022-17050/FE&CC, dated 22.09.2022 · Application for diversion of balance forest land i.e. 19.256 ha (including 1.014 ha safety zone) has been submitted vide Letter No. JSW/S/CO/2023/615, dated 27.09.2023. · NPV Amount of Rs. 19,30,88,250/- was submitted to the DFO by JSW Steel Ltd. Ex lessee paid Rs. 18,39,40,850/- as NPV. Total NPV paid = 37,70,29,100 /- (NPV has been paid for entire forest land by JSW) on 10.06.2020
National Park	No	Karo – Karampada Elephant Corridor (~7.7 Km from the Mine lease area in North direction)
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	-
Coastal Regulation Zone (CRZ)	No	-

Schedule-I species (Nos. and name of schedule-I species with authenticated letter)	Yes	Total 3 species i.e. Elephas maximas (Indian Elephant), Melursus ursinus (Sloth Bear) and Python molurus (Indian Python) of Schedule I according to (IWP A) Indian Wildlife Protection Act' 1972 was recorded in the study area during field survey.
Wildlife Conservation Plan	Yes	<p>Site-specific Wildlife Conservation Plan for 03 Schedule-I Species i.e. Elephant, Sloth Bear & Indian Python has been approved from PCCF & CWW vide letter no. 988/CWLW-FDWC-FD-0126/2021, dated 31.01.2022. Budget proposed for conservation of the same is Rs. 746.173 Lakh.</p> <p>PP has submitted Revised budget is Rs 1028.2771 Lakh vide letter dated 11.04.2025 approved from Divisional Officer Forest, Bonai Division.</p>
x. Green belt/plantation details:		
Proposed area for green belt/ plantation and no. of saplings proposed		<p>At conceptual stage, greenbelt/plantation will be carried out on 317.215 ha area.</p> <p>Nos. of saplings at conceptual stage 793038 @ 2500/ha</p>
Budget for green plant & plantation till the end of life of mine.		Rs. 15.86 Crore
Budget for nursery		Rs. 30.82 Lakh
Details of existing plantation and its survival rate		<p>At present, 32.17 ha area had been covered under the greenbelt/plantation with 80425 nos. of saplings</p> <p>Survival Rate 90%.</p>
No. of tree cuts in the mine lease area and compensatory afforestation		NA

restation	
Particulars for Green belt/plan tation	Area covered (In Ha)
7.5 m barrier & non-mineraliz ed zone	40.611
50 m safety zone of nallah, roa ds, electric lines	
500 m safety zones of nearest habitation villages	-
xi. 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/P ost-monsoon/Winter)	Winter Season
Predominant Wind direction (Fro m)	North West
Ambient Air Quality (no. of locat ions) and results	10
Noise level (no. of locations) and results	10
Water Quality (no. of locations) a nd results	Ground water: 08

	Surface water: 07
Soil Quality (no. of locations) and results	08
Hydro geological study and results	Detailed hydrogeology study has been carried out by Geo Climate Risk Solutions Pvt. Ltd. in June, 2023.

xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	National Level/Local Level: "The Times of India" & "The Dharitri" on 21.04.2022
Date of PH	23.05.2022 at 10:00 AM
Venue	Open field in front of proposed Indoor Stadium, Dhublameda village under Koira Block in the District of Sundargarh.
Chaired by	Dr. Binod Bihari Dash, Regional Officer, SP CB Rourkela. Shri Shiv Shankar Toppo, Additional District Magistrate, Sundargarh
Main issues raised during PH	Employment, Drinking Water Facility, Infrastructure, Education, Pollution, Plantation, Nearby Development, Medical Facilities etc.
Budget proposed for addressing issues raised during PH over 3 years	610 lakhs

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	Vide letter no. 536/IND-II-CTE 6207, dated 14.01.2019																	
Consent to Operate	Vide letter no. 4651/IND-I-CON-2258, Consent Order No. 2 944, dated 30.03.2024 & same is valid up to 31.03.2026																	
Certified Compliance Report and Inspection date	<p>Certified Compliance Report vide file no. 101-1040/18/ EP E, dated 19.09.2024. Action Taken Report for partially complied conditions has been submitted to Regional Office, Mo EF&CC, Bhubaneswar on 24.09.2024.</p> <p>Date of Inspection: 30.08.2024</p>																	
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	<table><tr><th rowspan="2">Period</th><th colspan="2">Production in Tonnes</th></tr><tr><th>Iron Ore</th><th>Mn Ore</th></tr><tr><td>2020-2021</td><td>4476524</td><td>496.518</td></tr><tr><td>2021-2022</td><td>5443454</td><td>4752.28</td></tr><tr><td>2022-2023</td><td>5296717</td><td>5191.404</td></tr><tr><td>2023-2024</td><td>5627775</td><td>554.00</td></tr></table>	Period	Production in Tonnes		Iron Ore	Mn Ore	2020-2021	4476524	496.518	2021-2022	5443454	4752.28	2022-2023	5296717	5191.404	2023-2024	5627775	554.00
Period	Production in Tonnes																	
	Iron Ore	Mn Ore																
2020-2021	4476524	496.518																
2021-2022	5443454	4752.28																
2022-2023	5296717	5191.404																
2023-2024	5627775	554.00																

xiv. Rehabilitation & Resettlement (R&R):

R & R details	This is an existing mine and expansion will be carried out within exiting mine premises.
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xv. Court case details:

Court Case, No and its present status	A court case is pending against the Project at Odisha High Court with order no. WP (C) 24918/2020 regarding the refund of excess stamp duty paid during the time of registration of lease deed.
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	As per the judgement of Hon'ble High court of Odisha dated 09.11.2020, it mention that: "The impunged levy of differential stamp duty paid by the petitioner-company on its mining lease deeds pursuant to demands dated 26.06.2020 shall be subject to final outcome of the writ petition".
Undertaking by Project Proponent w.r.t court case	Project Proponent has submitted an undertaking with regards to the court cases.

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted the an undertaking by way of notarized affidavit bearing no P072261 dated 15.04.2024 stating that the proposal does not involve violation of Ministry's OM dated 30.05.2018.
Undertaking by Project Proponent in EIA/EMP report	An Undertaking has been submitted along with EIA-EMP report.
Undertaking by Consultant in EIA/EMP report	Consultant has submitted the undertaking vide letter dated 21.06.2024 for the EIA/EMP report.
Plagiarism Certificate	PP has submitted the certificated dated 21.06.2024.

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Air, Noise, Water, Greenbelt/ Plantation etc.	Rs. 33.91/- crore including Rs. 7.46 Crore for Wildlife Conservation Plan	4.52 Crore

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)
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Total cost of EMP (Capital Cost of EMP + capital cost of Public Hearing)	Capital cost for EMP is Rs. 33.91 Crore including Rs. 7.46 Crore for Wildlife Conservation Plan and Budget proposed for addressing the issues raised during the Public Hearing: Capital Cost: Rs. 610 Lakh
Project Cost	Total cost of the project is Rs. 960 Crores
Employment (Nos)	Existing: 500, Additional: 452 & Total: 952

xix. Essential details were sought on 25.06.2024 & following reply was submitted on 09.08.2024:

S. No.	EDS Point	Reply by Project Proponent
1.	The Project Proponent needs to submit the latest Certified Compliance Report (not a year older from the date of inspection) by the Ministry's Regional Office.	<p>The project was monitored by the Regional Office of MoEF&CC at Bhubaneswar on 06.02.2023 and 07.02.2023 in line with the Certified Compliance Report for the expansion project. Based on the site inspection, a monitoring report was issued and ATR was sought by the IRO Bhubaneswar with some observations. The ATR submitted by JSW has undergone the due process of review, perusal and in turn certain clarifications were asked by the MoEF&CC, New Delhi.</p> <p>In view of the above, it is evident that IRO Bhubaneswar, post its inspection has constantly reviewed and perused the compliance status through evidential documents and site photographs. The last review of the compliance by IRO Bhubaneswar office was on 13.02.2024.</p> <p>Further, Jt. Secretary- MoEF&CC perused the compliance through personal hearing on dated 25.04.2024 and based on the deliberations and conclusions, JSW submitted required documents as concluding act.</p> <p>It is also submitted that on receipt of the cited observation through EDS as referred, clarifications explaining the case and request for perusal was made vide our letter dated 10.07.2024.</p>

		The duration of this entire process should be exempted from the one-year time period from the date of site inspection, as stipulated in paragraph (iii) of part B of the OM dated 08.06.2024.
Essential details were sought on 23.09.2024 & Reply was submitted on 24.09.2024.		
1.	Submission of Certified Compliance Report	Certified Compliance Report vide file no. 101-1040/18/EPE, dated 19.09.2024. Action Taken Report for partially complied conditions has been submitted to Regional Office, MoEF&CC, Bhubaneswar on 24.09.2024.

xx. Additional details were sought on 20.11.2024 & following point-wise reply was submitted on 27.11.2024:

Point 1

The Project Proponent (PP) needs to submit a protection plan for villages and schools located within or adjacent to the ML area, ensuring their safety from any mining related activities.

The nearby habitation of the Villages within 500 m from the ML boundary are the following: Village Orhauri, Harishchandrapur, Kusumidihi, Renglabeda and Segasahi.

Habitation details nearby the ML Area

Reply

s	e & Direction from Boundary	e & Direction from ML
andrapur	n SW direction	form Manganese quarry and ~70 m Iron Quarry in WSW direction
bed	n in NNE direction	n from Mn quarry in NNE direction ~270 m from Fe quarry in NW direction
hi	n in ENE direction	n from Mn quarry in ENE direction ~181 m from Fe quarry in East direction
dihi	n in NNW direction	n from Mn quarry in North direction

			~500 m from the Fe quarry in N ection
		in SSW directio	m from Mn quarry in SSW direct d ~680m from Fe Quarry SW dir

There is 1 school within mine lease and 2 schools are located within 500 m from the ML bo
undary.

	r			
	Village		handrapur	ih
	School	Narayanpos	PS Orahuri	Adarsha Vid
	from Mine bou	ML		
	e from UPL			

Protection Plan and safety measures for Villages and School:

- Ø As per the micro-meteorological data, pre-dominant wind direction was observed from NW. Habitation of Village Harishchandrapur is located at ~90m distance in SW direction from ML boundary.
- Ø Schools and Habitation of any Village will not be disturbed at any stage of mining.
- Ø Mining is being/will be carried out as per the provisions outlined in Mining Plan Approved by Indian Bureau of Mines as well as by abiding to the guidelines of Director General Mines Safety (DGMS) and Conditions mentioned in DGMS guidelines will be followed strictly.
- Ø Controlled blasting is being/will be adopted and optimum use of explosive energy is being/will be made by optimizing explosive charge per hole and per delay.
- Ø NONEL and bottom hole initiation system is being/will be used to control ground vibrations, noise & fly rocks.
- Ø Provision of monitoring of each blast is being/ will be made so that the impact of blasting on nearby habitation & dwelling units and schools is ascertained.
- Ø The blasting is being done in such a way that no damage is caused to residential houses.
- Ø Controlled blasting is being/will be carried out to reduce air blast and peak particle velocity.

locity in order to control effect of vibration in the nearby habitation and school.

Ø The drilling, charging, stemming and blasting operations are being/will be carried out under direct personal supervision of Manager/Asst. Manager. He maintains the records of blasting parameters for every blast.

Ø Main haulage road in the mine is being/shall be provided with permanent water sprinklers and other roads is being/ shall be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points are being/ shall invariably be provided with bag filters or dry fogging system.

Ø All measures are being/will be adopted to control fugitive dust emission during mining operation and to ensure no impact on nearby habitats and schools.

Ø For conducting blasting for mining operations, proper vibration studies are being/shall be carried out well before approaching such habitats or other buildings to evaluate the zone of influence and impact of blasting on the neighbourhood. Blasting is being/will be done within the permissible distance from habitation as permitted by DGMS.

Ø No mining operations are being /will be carried out within 50 meters of public works such as public roads and buildings or inhabited sites.

Ø A bund will be made around the habitation area.

Ø People will be notified in advance when noisy work is to be done to limit their exposure, further sign-post also will be for noisy areas.

Ø The ambient Air Quality Monitoring is being/will be done in the core as well as buffer zone of the ML area. There are 03 nos. of online CAAQMS and 4 nos. of manual monitoring stations located in the buffer zone. Records of the monitoring are being maintained properly.

Ø Beneficiation Plant for Mineral Processing will be based on latest technology comprising Drum scrubbers, double deck wet screens, jigs, dewatering screens, thickening cyclones, Thickener, Filter press, Hence, no major impact on air quality will arise due to processing plant.

Ø A thick plantation is being proposed in over the bund and Village safety zone to control dust emissions and noise.

Ø Green belt along the 7.5m mine lease periphery and plantation on dump and along the nallah is being/ will be carried out.

Ø Plantation around schools and residential areas will be carried out.

Ø Regular monitoring of air and noise levels at the project boundary and nearby sensitive locations.

Ø Appropriate protective measures are/will be implemented based on the monitoring results.

Ø Ensuring compliance with permissible standards set by regulatory authorities.

This detailed plan will be ensuring the safety and well-being of Villages and schools near the mining area.

Point 2 PP is required to submit a comprehensive protection plan for the rivers and nallahs flowing within or adjacent to the ML area to prevent contamination and environmental degradation.

Two seasonal nallahs viz. Narayanposhi and Kasira Nallah are flowing within the lease area which divide the whole lease into three parts from NE to SW. River Karo is flowing due North close to the Western boundary outside the lease area which constitutes the principal drainage system of the locality and collects surface run-off water through the seasonal nallahs.

No waste water is being discharged due to mining activities. Also, the beneficiation process will not use any chemicals and hence there is no likelihood of any chemical contamination of water bodies due to the mining activities; Following protective measures are/will be adopted to control the surface run-off:

Ø River & nallah will not be disturbed due to mining. Mining will be carried out at 50m away from the river and nallah.

Ø During monsoon, mine wash-off from pits are being/will be arrested by series of check dams proposed on the downstream side and silt settling ponds constructed at the lowest bench of the mine.

Ø The check dams & check bunds are being/ will be de-silted well before monsoon season every year to ensure clear water to overflow. The de-silted material is stacked separately.

Ø Guard walls and coco fibre fence have been made along the nala. Besides this, plantation has been carried out along the sides of nala.

Ø Retaining wall & garland drains are constructed around the dumps & at strategic points of quarries.

Ø The surface run-off from the external OB dumps is guided through sedimentation ponds and garland drains to the surface water course. It will prevent eroded material from reaching the main drainage/water course of the region.

Ø Regular monitoring of surface water quality is being/will be carried out.

Therefore, it can be concluded that major part of the surface runoff from working areas is being channelized to in pit settling cum percolation ponds located at various strategic locations. The rest part is channelized through garland drain to percolation cum settling pits and check dams.

Various protective measures viz. retaining walls, garland drains and settling cum percolation pond around the toe of dumps, blue dust stock yard, mineral reject stock, Top Soil stack, a round RF area and NH-215; Check dams around Nallahs and dumps have been constructed to prevent pollution of nalas present within the lease and water bodies nearby to the mine site.

Point 3 PP must engage a reputed national institute to conduct blasting/vibration studies, including fly rock distances and air overpressure. Furthermore, PP should submit a mitigative plan to ensure the smooth passage of vehicles during blasting activities.

The Department of Mining Engineering at the National Institute of Technology, Rourkela conducted a scientific study on blast-induced ground vibration and submitted the report in June 2024. Copy of the same is submitted along with ADS Reply.

Study on Air Over Pressure:

Based on the study as mentioned in para 5.2 therein, AOP observed ranges between 94.04 dB and 136.54 dB. The measured air overpressure was plotted against cube root scaled distance [SD]. Relation between the cube root of scaled distance and sound pressure was studied and a governing relation is determined as:

$$= -0.0703 (/Q^{1/3}) + 114.61$$

Where, AOP = Air Over Pressure (dB); D = Radial distance (m), and Q = Maximum charge per delay /kg

There exists a report that suggests the different noise levels and their possible consequences.

Noise level and its possible effect (Heck, 2014)

OP (dB)	Description
115	Old of complaints
134	ureau of mines recommended safe blasting
140	al Proven safe level
151	nal windows break
171	windows break
180	e structure damage

The above table shows that the sound level produced by blasting operations is within safe limits and would not affect human being adversely.

Study on Fly Rocks

In the trial blast carried out by the mines (mentioned at Para 5.5 and 5.6 of study report), it was observed that, the maximum distance travelled by those flying rocks of about 5.00 cm sizes were about 20 to 60 m from the blast patches. Those would not cause any harm as the area was secured during blasting operations.

	<p>The mines have also implemented the technique of muffle blasting to reduce the scattering of fly rock further, as below.</p> <p>In the Narayanposhi mine, the mines used metal wire mesh with dimensions 1.8m x 1.2m and a mesh aperture of 10mm as well as tin sheets of dimensions 6m x 4m to cover the blast holes. The positions of these sheets were secured with one or two bags filled with locally available fines weighing over 35 to 50 kgs each.</p> <p><u>Mitigative Plan for Highway Commuters</u></p> <ul style="list-style-type: none"> Ø The blasting activity at present is concentrated in the area which is 300m away from the National highway. Ø Keeping in view the advancement of mining faces towards National highway, PP has applied for obtaining controlled blasting permission from DGMS vide application No- JSW/NP/ DGMS/ BBSR-II/0353/ 24-25, 10.09.2024. Ø All the blasting operations upon advancing closer than 300m from National Highway shall be carried out in accordance with the recommendation of scientific study and provisions of permission as would be granted by DGMS. Ø Additionally, a SOP is formulated and same is submitted along with ADS Reply, wherein at S. No. 6.11 it is envisaged to halt traffic before the firing, in consultation with NHAI by erecting suitable barriers and posting of security to ensure safety of commuters.
Point	<p>PP is required to submit an action plan for the transportation of ore, in line with the NEERI recommendations, until the slurry pipeline is commissioned.</p>
Reply	<p>At present, Narayanposhi Iron and Manganese Ore Mine has dispatched 5.54 Million TPA ore and the same was dispatched through rail/road/ ship mode.</p> <p><u>Compliance to NEERI conditions and improvement in infrastructure since 2018:</u></p> <p><u>1. Development of Road Network:</u></p> <p>NH-215 is passing through the lease area which is widened and made four lanes, is the main connecting road to all the railway sidings. In addition to this, other branch roads of Barbil & Joda sector connected to NH from railway siding is widened and concreted. These roads are also provided with paved shoulders, proper drainage system and green belt.</p> <p>Regular vacuum cleaning of all mineral carrying roads is done by road sweeping machine deployed by mines and also by Govt. agencies.</p> <p>Besides this, cement concrete road has been constructed from mine entrance/exit to the NH and wheel washing system is installed in the exit gate.</p> <p><u>2. Other measures to control dust:</u></p>

Iron Ore from mine are transported through tarpaulin covered trucks up to the nearest railway siding and port from where it is transported to user destination by railway wagons and ships respectively. The trucks are regularly monitored for the emission of the vehicle (PUC) to ascertain emission limits as per the pollution norms.

Besides the existing iron ore transportation, additional 4 MTPA iron ore is proposed to be dispatched with available logistic infrastructures and following tentative incremental quantity by railway sidings is envisaged.

Location	Mode	Trucks/d	From
Rayanposhi	RAIL	4	7
4 MTPA	RAIL	3	03
	MJC	0	51
		6	5
	Harh	8	3
		6	5
		8	2
Working days considered: 330 days, Weight of considered: 20 Tonne			

For the incremental handling requirement and to supplement the existing capability of railways we have contributed 25 rakes to the existing rolling stocks under GPWIS and will add further as per need.

Point 5

PP needs to revise its proposed water requirements, taking into account current local consumption and future water needs. PP needs to improve upon technology to reduce water consumption during processing of iron ore. PP needs to develop methodology to recycle maximum water.

Reply

The requirement of makeup water for beneficiation and slurry pumping earlier was planned for @553 m³/hr. Further technological development will be introduced and reduction in requirement of make-up water is aimed as @539 m³/hr (a saving of 14 m³/hr). The details are as narrated below: -

Activity	Require m ³ /hr)	Require m ³ /Day	Source
----------	-----------------------------	-----------------------------	--------

iation & sl pumping	9	936	m ³ /Day- Gr ater & D ng water
and Allied ivities	5	50	
otal	4	296	

Description	hr	Day
Addition in Plant	3	52
Recovery & recycle	4	216
Loss in tailing, prod and evaporation lo	9	936
Sp water to plant	9	936

Improvement:

- It is discussed with our consultant M/s. MECON that for reducing evaporation loss, the depth of water reservoir would be reduced by 1 m So that Surface area can be minimized. The evaporation loss would be reduced from 39m³/hr to around 30 m³/hr.
- All drainage would be made with coverings and would be channelized to main reservoir for re-use of water.
- Big size of filters with polypropylene filter cloths would be used for minimizing the moisture carrying by tailings. With this technological change moisture in tailing could be reduced to 20% as against the planned 23%. This will help reduce the water loss to 28m³/hr from 33m³/hr.
- The mine site has three recharge ponds with 5779.5 m³ capacity for pond 1, 2478.7 m³ capacity for pond 2 and 6789.7 m³ for pond 3, making it total 15,047.99 m³. Average annual rainfall is taken as 1300mm. Presuming that number of fillings will be 3 times in a year thus taking no. of days water available in water conservation structures is 120 days So, total estimated recharge from three ponds 81,258.5 m³ /year.
- Waste water generated from workshop is being treated using oil–water separator and treated water is being used in dust suppression & vehicle washing.
- Sewage waste generated from canteen, mine office & toilets is being disposed in soak pit via septic tank.

- g. Use of wetting agents is recommended to reduce water consumption.
- h. Re-use of water recovered from processing plant.
- i. Rain water harvesting from roof tops of buildings and other super structures for storage. The roof top rain water is collected and channelized to the recharge well in the camp area.
- j. Suitable storm water drainage system along the roads is provided to dispose storm water effectively. The surface run-off collected in the storm water drains is channelized through a series of settling-cum-percolation ponds before discharged.
- k. Staggered trenches of 2m x 1m dimension are proposed to be constructed along the contours so that during sudden storm, good amount of run-off can be harvested which will maintain a good amount of soil moisture content.
- l. For effective harvesting of rain water from the valley in the northern part of the lease area, a recharge tank with overflow system is already provided.

Point 6 PP is required to submit an action plan to reduce diesel consumption, increase renewable energy use, and adopt electric vehicles within the ML area to align with sustainable practices.

1. Action Plan to Reduce Diesel Consumption

Ø Total Diesel Consumption per tonne of Iron ore for FY 2023-24:

	Diesel Consumption (litres per tonne of ore)
Excavation	
Processing	
Dispatch	
Diesel consumption	1.35

Ø It is proposed to construct a Crushing and Screening Plant of 2000 tph, which would be electrically operated. This will reduce the specific diesel consumption from 1.35 litres per tonne to 0.68 litre per tonne only, amounting to reduction of 6700 kilo litres per annum corresponding to 10 million tonne of iron ore production.

2. Increasing Use of Renewable Energy

- Ø At present 50 KW of solar power system is installed an additional 50 KW installation is planned for completion by the end of this financial year.
- Ø 3 km of solar fencing has been installed to protect wildlife and reduce human-wildlife interactions.
- Ø In the Buffer Zone, 22 solar-powered borewells (equipped with overhead tanks, stand posts, solar panels, and pipelines) have been installed, along with 50 solar streetlights in nearby communities, encouraging the use of clean energy.

3. Adoption of Electric Vehicles within the Mining Lease

Ø JSW Steel is a founding member of the EV100+ initiative, an international movement

aimed at phasing out heavy, polluting vehicles.

Ø Feasibility studies are underway to evaluate the suitability of electric trucks and loaders in JSW mines at Odisha in collaboration with M/s Propell Motor and M/s Sany India limited.

Ø Possibility will be explored for deployment of electric operated heavy mining vehicles.

Point 7

PP needs to obtain a certificate from the Department of Mines and Geology (DMG) confirming that no mining activity has been undertaken at the ML boundary (Safety Zone) on the northern side.

Reply

A Certificate from the Department of Mines and Geology (DMG) stating that no mining activity has been undertaken at the ML boundary (Safety Zone) on the northern side. Copy of the same is submitted along with ADS Reply.

Point 8

PP must submit a copy of the Stage-I Forest Clearance (FC) for 19.256 ha of forest land, along with the transfer of Stage-II Forest Clearance for 238.201 ha of forest land in its name.

Ø M/s AMTC the erstwhile lessee has obtained forest clearance over the entire forest area falling within the mining lease, barring 14.864 Ha as safety zone & Greenbelt, as per extant rule vide F.No. 8-34/2000-FC (Vol.-I) dated 15th Nov 2007.

Ø In 2020, upon getting the mining lease through auction process JSW got vested with the Forest Clearance which was granted to erstwhile lessee.

Ø Pursuant to amendment in MMDR and guideline issued by MOEF & CC transfer of Forest clearance vide No. FE-DIV-FLD-0067-2022-17050/FE&CC, dated 22.09.22 is made in the name of JSW over area of 238.201 Ha

Ø NPV has been paid for the entire forest area and CA land also has been provided for the total forest area within the lease. Details of NPV and CA land is given below.

Reply

aid b	
-Less	40, 850/-
7	8,250/- (over en est land @ 7.5 la)
PV	29, 100/-

ND STATUS OF NA AYANPOSHI

rn	a)	tion
d pr by see for a)	0	Kus of B nge u Bonai Divis
d pr by Pre- ken)	0	Phul of BJ e und onjhar n
d pr by resh on)	0	Lep a of L da ra der S arh D

Ø On account of DGPS survey and georeferencing of village sheet some differences are noticed and accordingly 19.256 Ha of forest area needed Forest Clearance. For which our FC application is with state govt for further processing.

Ø Further, it is to submit that no mining activity is planned in the un-diverted area of 19.256 Ha, which is also shown in then Mining plan for 2025-30. The same is verified and scrutinized by the RCOM, Bhubaneswar.

Point 9 PP is required to submit the status of Scheduled Tribe (ST) land within the ML area, detailing any specific considerations or approvals needed.

Reply Lease of Narayanposhi Iron & Mn Mines is executed over an area of 349.254 Ha (as per RoR). Surface right over an area of 324.800 Ha was granted to the ex-lessee and has been vested to JSW Steel vide vesting order 15.02.2024. We are yet to obtain the surface right over the balance area of 24.643Ha as shown in the enclosed map. Out of such 24.643Ha, an area of 13.357 Ha is designated as ST land. The said ST land is in the possession of their owners. The conceptual mining plan highlighted in green and yellow (earmarked as M1, M2, M3) is situated on the southern side of highway. The ST land in the rectangle ABCD shown in the map is highlighted in blue colour. It is evident that we have no working plan in this area and hence there is no plan to acquire the ST land.

xxi. Additional details were sought on 11.12.2024 & following point-wise reply was submitted on 13.12.2024.

S. No.	ADS	Reply
1.	PP needs to submit a copy of the Stage-I Forest Clearance for 19.256 ha of forest land.	19.256 Ha of forest area is needed for Forest Clearance, which is currently in progress with the State Government. No mining activity is planned in the aforementioned forest area of 19.256 Ha, as shown in the mining plan and mentioned on page no. - 4, 31, and 71 of the approved Mining Plan along with the Progressive Mine Closure Plan (2025-2030) by the Indian Bureau of Mines, Bhubaneswar, vide letter no. RMP-2309/2024-25-IBM_RO_BBS, dated 06.12.2024. This information has also been conveyed to the EAC (NCM) through an email dated 06.12.2024.
2.	PP needs to submit software generated Plagiarism certificate.	Copy of the certificate is submitted along with ADS Reply.
3.	PP needs to clarify whether Wildlife Conservation Plan has been prepared as per Wildlife Amendment Act 2022 or not.	The Wildlife Conservation Plan was prepared by the DFO and approved by the PCCF & Chief Wildlife Warden, Odisha, vide letter no. 988/CWLW-FDW C-FD-0126/2021, dated 31.01.2022. Following the implementation of the amended Wildlife Conservation Act 2022, we have requested the Forest Department to revisit the SSWLCP, vide letter no. JSW/S/CO/2024/585, dated 10.09.2024. The Forest Department has issued a revised authenticated list of flora and fauna and same is in the process of revising the existing SSWLCP to incorporate the amendments in the WLA. The company shall submit the approved Wildlife Conservation Plan within two months.

xxii. Additional details were sought on 27.02.2025 & following point-wise reply was submitted on 02.03.2025:

S. N o.	ADS	Reply
1	<p>Unauthorized construction: JSW Steel Ltd completed construction of a 2000 TPH Central Processing Unit and a 6.0 MTPA Beneficiation Plant within the mining lease area before obtaining EAC recommendations or the mandatory EC. This constitutes gross violations of the EIA Notification, 2006, and the Environment Protection Act, 1986. Satellite images from 2023 and November 2024 clearly show these facilities constructed without prior environmental clearance or Consent to Establish.</p>	<p>The construction of crushing and screening plant is started for sizing of iron ore without any upgradation of quality for which Consent to Establish (CTE) is obtained from SPCB-Odisha vide letter no. 19304/IND-II-CTE-6577 dated 04.12.2021 as per the provision of Air and Water Act. This shall cater the present production capacity of 6 million Tones. It may be noted that the same is not covered by the provisions of EIA Notification, 2006 as clarified in the OM dated 22.09.2008 of MoEFCC.</p> <p>We would like to confirm that no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. MoEFCC may depute any official to check the fact. Additionally, we want to add that no procurement orders for beneficiation equipment have been placed to date.</p>
2	<p>Serious environmental hazard: As the mine area is undulating hills with altitudes varying from 545 m to 640 m above MSL, general slope of the area is towards north and National Highway NH215 and Rajamudna-Rimuli road pass through the ML area through the mining lease area. The operation of the said illegal high-capacity beneficiation plant will generate huge quantity tailings whose improper management may lead to slippage to NH- 215.</p>	<p>A suitable location has been identified for establishing the 6.0 MTPA Beneficiation Plant, taking into account all necessary environmental, technical, and regulatory considerations. The tailings as proposed to be generated from beneficiation plant will be in the form of dry filter cake and are proposed to be discarded along with the mine waste.</p> <p>Proposed Tailing Management</p> <ul style="list-style-type: none"> • Tailing cake from the beneficiation plant will be hauled to the backfilled area • Overburden will be progressively dumped over the tailing

		<ul style="list-style-type: none"> • Waste management scheme (OB + Tailng) is prepared with a bottom-up approach for dumps creation with filter press material encircled within the host rocks material. This approach can prevent any potential flow of filter press dump material. • The top cover will be reclaimed by plantation. <p>With the above tailing management plan there would not remain any scope of slip page of tailing towards any other public property as the same would be contained within the worked-out mine and would be overlaid by other over burden.</p>
3	<p>Karo river flows adjacent to the ML area in the northwest direction, and in certain sections, overlaps with the ML area. Additionally, the Orahari Nallah runs adjacent to the ML area in the northwest, while the Kashira Nallah and Narayanposhi Nallah traverse through the ML area.</p>	<p>Mine working is planned to ensure protection of nallah leaving 50 m stretch all along. Adequate run-off management by check-dam, garland drain, siltation pond etc. to ensure non-entry of silt to water body.</p>
4	<p>Public Hearing Non-compliance: Public consultations in affected villages were reportedly not conducted as per mandatory requirements. Public hearing in villages of Harishchandrapur, Koiraa, Kashira, Kusmdihi, and Kathamala RF for construction 2000TPH Central Processing unit and grinding & 6.0MTPA Beneficiation plant has not been conducted. It is again violation E.P Act. and EIA 2006</p>	<p>The public hearing for the project has been conducted in accordance with APPENDIX IV of EIA Notification, 2006 fulfilling all the mandatory requirements. All necessary records and documentation related to the public hearing are available for reference. Public hearing proceeding is attached herewith as Annexure-I for the reference. The Company also would like to inform that public hearing was conducted on 23.05.2022 under the chairmanship of Additional District Magistrate, Sundargarh at Open field in-front of proposed Indoor Stadium, Dhublbedda Village under Koiraa Block in the District of Sundargarh as selected by SPCB, Odisha.</p>

5	<p>Misrepresentation of Facts: As can be inferred from the last EAC meeting the proximity of protected reserves, rivers, and critical water bodies to the mining lease area was not transparently disclosed by the project proponent.</p>	<p>Details of forests, water bodies/ rivers are mentioned in the final EIA report at Table - 3.1 Environmental Settings of the 10 km Study Area at page no. 125-126 and also presented before the hon'ble committee. This information is already been disclosed during different stages of EC process and is available in the public portal for reference.</p>
6	<p>Excessive water withdrawal: The huge water drawl of 11,550cum/day from Baitarani River will severely affect may adversely impact local water availability and when the said river is already stressed due to large-scale mining and only major river in the said mining zone for local inhabitants.</p>	<p>The requirement of drawl of 11, 550 cum/Day from Baitarani River was envisaged, which further was reduced to 11, 214 cum/day. Out of the said requirement 9462 cum/day would be utilized as conveying media for slurry transportation of iron ore in compliance with NEERI recommendations for avoiding the reliance on road transport. It is pertinent to note that out of 9462 cum/day again 9384 cum/day would be recovered at user end (Paradeep) for alternate utilization by the industry.</p> <p>Dept. of Water Resources, Govt. of Odisha has allocated 39 cusec of surface water from Kanupur dam of Baitarani River to Narayanposhi and Nuagaon mines of JSW. To meet the requirement of NEERI recommendations, beneficiation and slurry pumping project is proposed to fulfill the SOTM model. There is no significant impact on local habitats and for the water availability.</p>
7	<p>As per vested order issued post auction of the said mine, EC for 6.0 MTPA iron ore production and 2.0 MTPA Beneficiation plant issued to erstwhile lessee AMTC was vested to JSW Steel Ltd. The new lessee JSW Ltd, soon after execution of ML, applied to MOEF&CC, GoI for expansion of iron ore</p>	<p>We would like to clarify that alleged claim stating that The EAC meeting had noted that project proponent JSW Ltd has not carried out the public hearing is a misinterpretation of the facts. The public hearing was conducted as per the mandatory requirements, ensuring transparency and compliance with APPENDIX IV of EIA Noti</p>

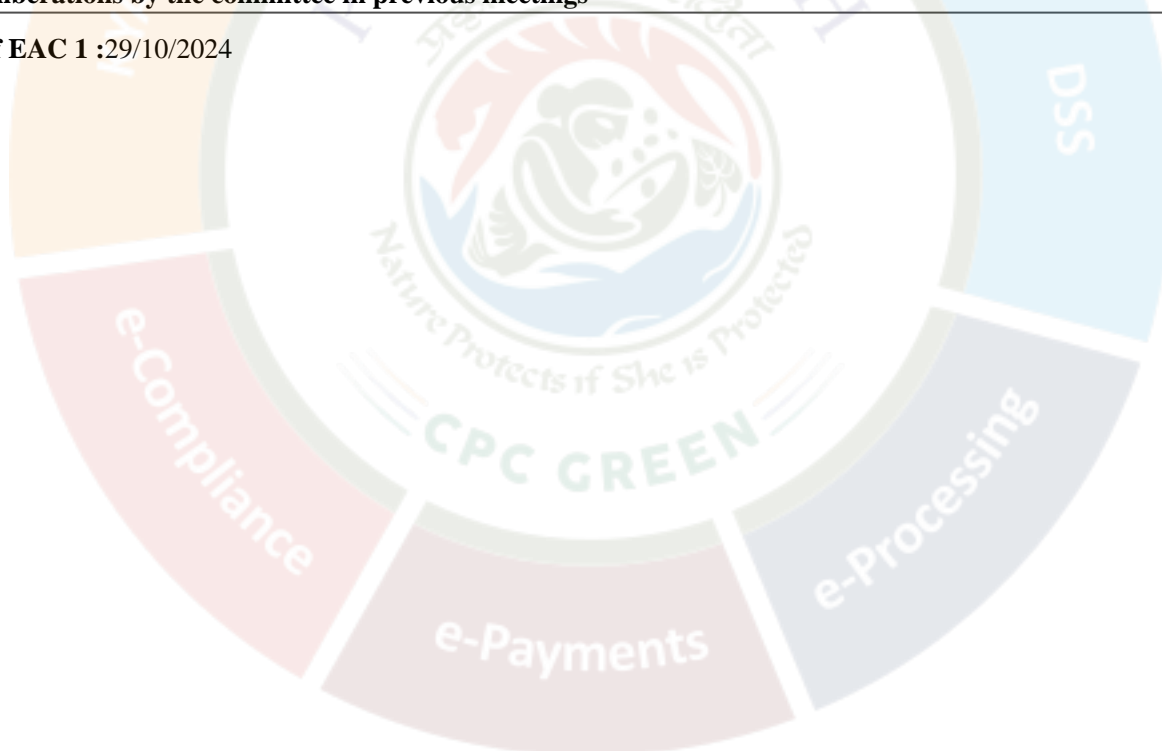
	<p>production to 10 MTPA (ROM) of iron ore, 0.036 million TPA of manganese ore (ROM) along with screening, crushing and 6.0 MTPA beneficiation plant in the lease area, and the Expert appraisal committee has approved the TOR in its 31.12. 2020. The project proponent had again applied for amendment of TOR and proposal was considered in the 45th EAC (Non-Coal Mining) meeting held during 24th, 25th and 27th January, 2022. The EAC meeting had noted that project proponent JSW Ltd had not carried out the public hearing.</p>	<p>fication, 2006 fulfilling all the mandatory requirements after grant of amendment in TOR by the 45th EAC (NCM) committee held on 22-27 Jan 2022. All relevant stakeholders were given the opportunity to participate, and their concerns were duly recorded and addressed. All necessary records and documentation related to the public hearing are available for reference. Public hearing was conducted on 23.05.2022 under the chairmanship of Additional District Magistrate, Sundargarh at open field in front of proposed Indoor Stadium, Dhublabeda Village under Koira Block in the District of Sundargarh.</p>
8	<p>Instead of complying the approved TOR, preparation of EIA and EMP and public hearing as directed in aforesaid EAC meeting, JSW Steel Ltd started construction of 6 MTPA iron ore beneficiation plant in 2023 and more than 90% of the project has been completed in 2024. These activities are gross violation of E.P. Act.</p>	<p>As stated earlier, no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. Even the detailed engineering and procurement of equipment is not yet started.</p> <p>MOEF may depute any official to check the fact. The above allegation is unfounded.</p>
<p>xxiii. Additional details were sought on 19.03.2025 & following point-wise reply was submitted on 04.04.2025:</p>		
S. No.	ADS	Reply
1	<p>PP should obtain and submit a report on current status of installation of beneficiation plant in the project after site inspection by MoEFCC Regional Office, Bhubaneswar on 19.03.2025.</p>	<p>Site visit of the IRO was done on 26.03.2025 and based on the observations made during inspection and documents submitted, the status report was prepared and submitted to the MoEF&CC, Vide File No. 101-1040/18/EPA, dated 04.04.2025.</p> <p>Site inspection report along with the status is enclosed with ADS Reply.</p>

xxiv. Additional details were sought on 08.04.2025 & following point-wise reply was submitted on 17.04.2025:

S. N o.	ADS	Reply
1	PP should submit the present status of implementation of revised Wildlife Conservation Plan.	Divisional Forest Officer of Bonai Division, Sundergarh (District) has revised the site-specific Wildlife Conservation Plan with regard to Narayanposhi Iron Ore and manganese Mine of M/s. JSW Steel Ltd. The same is forwarded to PCCF (WL) and Chief Wildlife Warden through RCCF Rourkela for approval. Copy is enclosed with ADS Reply.

3.2.3. Deliberations by the committee in previous meetings

Date of EAC 1 :29/10/2024



Deliberations of EAC 1 :

The instant project proposal pertains to the Narayanposhi Iron and Manganese Ore Mine, involving an enhancement of Manganese Ore (ROM) is 0.036 MTPA, with OB at 0.223 MTPA and a total excavation of 0.259 MTPA. The project includes a processing plant with a capacity of 6.0 MTPA for mineral processing, and a Slurry Pumping Station to transport Iron Ore Concentrate.

The Project Proponent and Consultant presented the KML file, outlining the site's features to the committee members. It was stated that no protected forests exist within a 10 km radius of the project area, although the Kathamala Reserve Forest was acquired after successfully bidding on 24.06.2020, with the mine lease executed and registered in favor of M/s JSW Steel Ltd transferred to M/s JSW Steel Ltd under the provisions of S.O. 2817(E) dated 13.07.2021 (auto transfer under Section 25 of the Forest Act, 1927).

PP further stated that the Karo River flows adjacent to the ML area in the northwest direction and, in certain sections, it flows through the ML area. In response, the EAC directed the Project Proponent to submit a detailed protection plan for the river.

The EAC enquired about the current blasting practices within the ML area and the measures implemented to ensure safety. A national institute is to be engaged to conduct comprehensive blasting and vibration studies to measure fly rock distances and air overpressure.

During the presentation, the EAC noted that the PP proposed a water requirement of 568 m³/hr for mining activities, specifically the Baitarni River. The EAC expressed concern that the proposed water requirement is excessive and not sustainable.

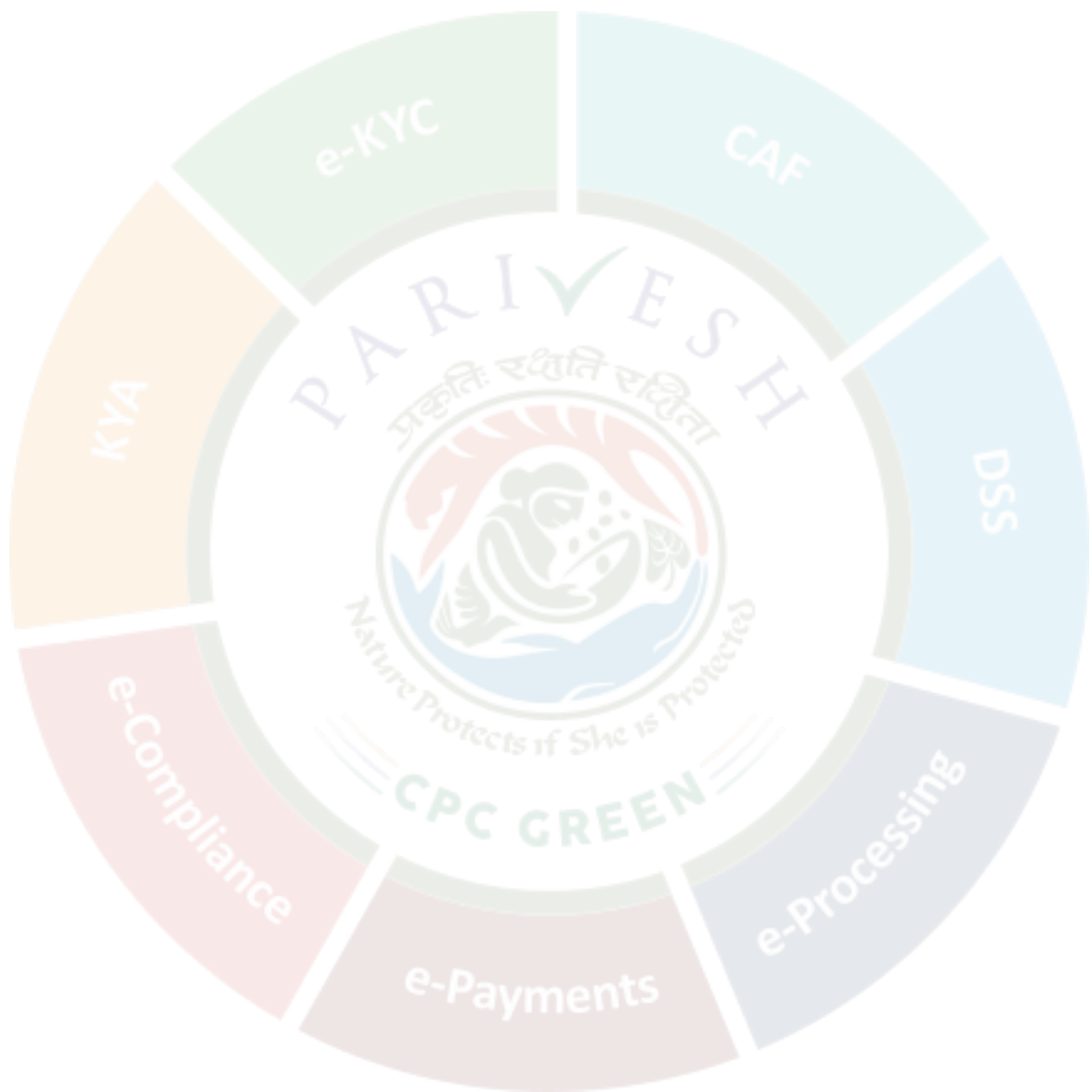
The EAC further inquired about the rationale for constructing a 302 km pipeline instead of adopting ore transport by road, waste to the dump area, and processed ore to the stacking yard. Initially, iron ore will be sent to JSW plants and then to the railway, or pipe conveyor.

The EAC took note of PP's explanation and directed the PP to submit a detailed action plan for ore transport, considering its water requirement, considering current local consumption patterns and potential future needs, to ensure sustainability.

Further, the EAC noted the presence of dense vegetation and plantation along stretches of National Highway-2. The EAC directed the PP to minimize environmental impact.

Additionally, the EAC observed that some mining activities appeared to have been undertaken near the common boundary. The PP to submit a certificate from the State Directorate of Mines and Geology (DMG) confirming that no mining activities are taking place.

Regarding the existing forest land within the ML area, the EAC inquired about the status of the Forest Clearance. The PP has applied for Stage-II for 238.201 ha, and the PP has applied for Stage-I FC for the remaining 19.256 ha of forest land.



Deliberations of EAC 2 :

The EAC deliberated the ADS points related to environmental clearance for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216MTPA & existing capacity of Manganese Ore (ROM) 0.036MTPA & OB 0.223MTPA with total Excavation 0.259MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha.

The Project Proponent and the Consultant presented the KML and explained the key site features of the mining lease and the Study area. Upon reviewing the KML file EAC asked about the ongoing construction within the ML area. PP submitted that they are constructing a beneficiation plant with capacity of 2 MTPA along with crusher and screening plant within the Mine Lease area as per earlier EC dated 18.06.2019.

EAC further asked PP about the land breakup of the ML area, PP submitted that out of total land area of 347.008 ha (as per DGPS)/349.254 (as per RoR), 257.451 ha is forest land, 55.648 ha is Govt. land, 4.687 ha is private land and 29.222 ha is ST land. PP also submitted that they are not going to undertake any activity in the ST land.

Further PP highlighted the villages Harischandrapur (90 m in W direction), Rengalbeda (110 m in NNE direction), Segashi (160 m in ENE direction), Kusumdihi (200 m in NNW direction) and Orhuri Located at a distance of 220 m in SS direction

PP informed that NH-215 and the Rajamunda–Rimuli road is passing through the ML area. The Karo-Karampada Elephant Corridor is located 7.7 km north of the ML area. PP stated that no protected forests exist within a 10 km radius of the project area, although the Kathamala Reserve Forest (RF) lies within the ML area, with several other RFs, including Mendhamaruni, Karo, Tortha, and Siddharnath, located within a 1-9 km range in W direction from the ML area.

EAC noted the submission of the PP and thereafter deliberated the ADS points raised vide minutes of the 35th EAC held during 28-29 October 2024. With regard to safety of schools and habitation nearby ML area, PP submitted that one school (Govt PS Narayanposhi) is located within ML area and two schools namely Govt. UPS Orahuri and Odisha Adarsha Vidyalaya are located within 600 m distance from ML boundary. The distance of the UPL from the school located within ML boundary is 80m whereas distance of other two schools from UPL is 360 m and 540 m respectively. With regard to safety of school PP submitted that mining will be carried out as per MMR (Metalliferous Mining Regulation)/DGMS guidelines Controlled blasting is being/will be adopted and optimum use of explosive energy is being/will be made by optimizing explosive charge per hole per delay, NONEL and bottom hole initiation system is being/will be used to control ground vibrations, noise & fly rocks etc.

EAC noted the submission of the PP and advised PP to undertake blasting during non-school hours. PP should also install metal wind screens and thick plantation across the school boundary both for the school within ML and as well as for the two schools outside the ML area. Similarly steps should be taken for habitations near the ML area. No blasting activity should be carried at a distance of 500 m from the school and habitation. PP needs to take permission from DGMS if they reduce the distance less than 500

m from the school.

With regard to comprehensive protection plan for the rivers and nallahs flowing adjacent to ML area, PP submitted that River Karo (Length: 0.6 km & Width: 7 to 15 m) is flowing North close to the Western boundary outside the lease area which constitutes the principal drainage system of the locality and collects surface run-off water through the seasonal nallahs. Two seasonal nallahs viz. Narayanposhi (Length: 0.5 km) & Kasira Nallah (Length: 1.8 km & Width: 7 to 15 m) are flowing within the ML area which divide the lease into three parts from NE to SW. Orahari Nallah (Length: 3.2km & Width: 7 to 15 m) flowing from the SW to North direction. PP mentioned that no waste water is being discharged due to mining activities. PP also mentioned that the beneficiation process will not use any chemicals and hence there is no likelihood of any chemical contamination of water bodies due to the mining activities. PP stated that mining will be carried out at a distance of 500 m away from the river and nallah. During monsoon, mine wash-off from pits are being/will be arrested by series of check dams proposed on the downstream side and silt settling ponds constructed at the lowest bench of the mine.

Regarding blasting and vibration studies, PP submitted that Department of Mining Engineering at the National Institute of Technology, Rourkela conducted a scientific study on blast-induced ground vibration and submitted the report in June 2024. As per the study the PPV post blasting was to range from 1.271 mm/sec to 9.776 mm/sec and Air Over Pressure were found from 94.04 dB to 136.54 dB. 1.271 mm/sec to 9.776 mm/sec and Air Over Pressure were found from 94.04 dB to 136.54 dB. The recommended maximum charge per delay as per the practiced design was 81.92 kg with air overpressure at 112.98 dB at 100m. The maximum charge amount per delay increases as the distance increase. The air overpressure values do not increase correspondingly. The maximum charge per delay at 500 m as per the suggested design is 2048.2 kg, and the corresponding data for air overpressure is 111.83 dB. EAC noted the submission of the PP and advised to strictly adhere to MMR (Metalliferous Mines Regulations)/DGMS guidelines and recommendation of the study for undertaking blasting activity.

EAC, noted the submission of PP with regard to transportation and directed PP to strictly follow NEERI recommendations for Sustainable Ore Transport Mechanism.

Further, EAC reviewed the revised water requirement submitted by PP and advised PP to construct rain water harvesting structures to reduce its dependence of river water.

EAC also noted the Certified Compliance Report of Regional Office Bhubaneswar dated 19.09.2024. PP has submitted Action Taken Report against the observations of Regional Office Bhubaneswar on 20.09.2024.

With regard to submission of FC Stage-I for remaining forest land of 19.256 ha, PP submitted that they have applied for FC stage –I and their application is with State Govt for further processing. PP submitted that no mining activity will be undertaken in the undiverted area and the same is reflected in the approved mining plan approved by RCOM Bhubaneswar dated 06.12.2024. EAC noted the submission of PP and directed that PP will not take any mining activity in the undiverted Forest Land.

Regarding Wildlife Conservation Plan, PP submitted that the Wildlife Conservation Plan was prepared by the DFO and approved by the PCCF & Chief Wildlife Warden, Odisha, vide letter no. 988/CWLW-FDWC-FD-0126/2021, dated 31.01.2022. Following the implementation of the amended Wildlife

Conservation Act 2022, PP have requested the Forest Department to revisit the SSWLCP, vide letter no. JSW/S/CO/2024/585, dated 10.09.2024. The Forest Department has issued a revised authenticated list of flora and fauna and is in the process of revising the existing SSWLCP to incorporate the amendments in the WLA. PP committed during the meeting that they shall submit the revised approved Wildlife Conservation Plan within two months.

Based on the aforesaid discussion, the EAC **recommended** the proposal for Environmental Clearance in the 38th EAC (Non-Coal Mining) meeting held on 27th December, 2024 for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216MTPA & existing capacity of Manganese Ore (ROM) 0.036MTPA & OB 0.223MTPA with total Excavation 0.259MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s JSW Steel Ltd located at Sundargarh, Odisha subject to the following specific conditions in addition to the existing standard condition applicable for non-coal mining projects:-

3.2.4. Deliberations by the EAC in current meetings

The EAC deliberated the ADS points related to environmental clearance for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216MTPA & existing capacity of Manganese Ore (ROM) 0.036MTPA & OB 0.223MTPA with total Excavation 0.259MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha.

The instant proposal was earlier recommended by the EAC vide minutes of the 38th EAC-NCM meeting held on 27.12.2024.

However, a complaint was received in the Ministry regarding construction of Beneficiation plant in the project more than capacity stipulated in old EC condition on 26.12.2024.

An Additional Details Sought (ADS) was raised to the Project Proponent (PP) seeking a pointwise reply to the issues raised in the complaint. In reply to the ADS PP stated that *“The construction of crushing and screening plant is started for sizing of iron ore without any upgradation of quality for which CTE is obtained from SPCB-Odisha dated 04.12.2021 as per the provision of Air and Water Act. This shall cater the present production capacity of 6 million Tones. It may be noted that the same is not covered by the provisions of EIA Notification, 2006 as clarified in the OM dated 22.09.2008 of MoEFCC. We would like to confirm that no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. MoEFCC may depute any official to check the fact. Additionally, we want to add that no procurement orders for beneficiation equipment have been placed to date”*.

However during 38th EAC meeting on 27.12.2024, PP had submitted that *“they are constructing a beneficiation plant with capacity of 2 MTPA along with crusher and screening plant within the Mine Lease area as per earlier EC dated 18.06.2019”* and it was minutised in the 38th EAC NCM meeting.

Since the PPs submissions were different in its ADS reply dated 02.03.2025 and its submission during 38th EAC meeting dated 27.12.2024 it was decided after taking inputs from EAC members that RO Bhubaneswar may conduct a site inspection and verify the construction of crushing screening plant and beneficiation plant.

Subsequently an ADS was raised asking that “PP needs to obtain and submit a report on current status of installation of beneficiation plant in the project after site inspection by MoEFCC RO, Bhubaneswar”.

Accordingly RO Bhubaneswar undertook the site inspection and reported that *“During visit incomplete construction was observed on the premises. PP reported that 80 Percent of construction of 2000 TPH crushing and screening plant construction and erection work is completed. It was also reported that it is likely to be completed by July 2025. During visit installation of beneficiation plant part has not been observed. The construction activity observed on 26.03.2025 at the proposed central processing unit for conveyor, primary crusher, screens, cone crusher, stackers, ECR buildings and the stacker along with proposed electrical control room -II for stacker.The construction activity of the beneficiation plant is yet to be started.”*

Since the PPs ADS reply dated 02.03.2025 and report of RO Bhubaneswar after site inspection on 04.04.2025 were not in consonance with 38th EAC minutes therefore the proposal was again referred to EAC in its 43rd EAC meeting on 22- 23.04.2025.

During the meeting PP stated that the construction of crushing and screening plant has been started for sizing of iron ore without any upgradation of quality for which Consent to Establish (CTE) is obtained from SPCB-Odisha vide letter no. 19304/IND-II-CTE-6577 dated 04.12.2021 as per the provision of Air and Water Act.

EAC noted the submission of PP and enquired whether the CTE obtained vide letter dated 04.12.2021 was in accordance with EC dated 18.06.2019. PP stated that upon grant of mining lease in the year 2020, M/s JSW Steel Ltd planned to establish a 2000 TPH screening and crushing having the same total capacity as provided in the EIA /EMP report of EC of 2019.

PP further stated that they envisaged to replace multiple smaller capacity mobile screening and crushing plant with single point fixed crusher & screen plant for achieving enhanced efficiency, better environmental management by providing suitable enclosures to all the equipment, provide network of

dry fog dust suppression system, dust extraction system and development of surrounding green belt area on the proposed location. EAC noted that the EC issued to the project dated 18.06.2019 was given for the following configuration of crusher and screening:-

S.No.	Crusher/Screening	Capacity	Numbers	Total
1	Mobile Screening	200 TPH	3	600 TPH
2	Mobile Screening	150 TPH	4	600 TPH
3	Mobile Screening	100 TPH	2	200 TPH
4	Fixed Crusher	350 TPH	1	300 TPH
5	Mobile Crusher	150 TPH	1	150 TPH
6	Mobile Crusher	100 TPH	1	100 TPH
7	Stand by Mobile Crusher	150 TPH	1	150 TPH
8	Stand by Mobile Crusher	100 TPH	1	100 TPH
8	Stand by Mobile Screening	150 TPH	2	300 TPH
9	Stand by Mobile Screening	100 TPH	1	100 TPH

	een			
10	Stand by Mobile Screen	200 TPH	1	200 TPH
11	Revolving Screen	10 TPH	1	10 TPH

As per the earlier EIA EMP report total capacity of 1400 TPH of Mobile screen and 600 capacity of stand by Screen was mentioned. Similarly, 350 TPH fixed crusher, 250 TPH mobile crusher and a standby of 250 TPH mobile crusher was mentioned along with 10 TPH revolving mobile screen.

Furthermore, with regard to construction of beneficiation plant which was recorded in the minutes of 38th EAC-NCM meeting held on 27.12.2024, PP reiterated that they have not undertaken any construction activity related to the Beneficiation Plant in the ML area and this fact has been also mentioned in the Regional office, MoEFCC report dated 04.04.2025. PP also expressed their regret for not bringing the fact in front of the EAC during the 38th EAC-NCM meeting held on 27.12.2024.

EAC noted that as per the Regional office of MOEFCC report “PP reported that 80 % of construction of 2000 TPH crushing and screening plant construction and erection work is completed”.

Beside above, EAC noted that two CTEs were issued to the project by OSPCB dated 04.06.2021 and 04.12.2021 with some variations in configuration of crushing and screening facility. Accordingly, EAC asked PP to provide a comparative analysis of the ongoing construction of crushing and screening facilities in comparison with earlier EIA EMP report (on the basis of which EC dated 18.06.2019 was issued) and Consent to Establish dated 04.06.2021 and 04.12.2021 issued by OSPCB.

In view of the above, EAC **deferred** the proposal for want of following requisite information:-

- i. PP needs to provide a comparative analysis of the ongoing construction of crushing and screening facilities in comparison with earlier EIA EMP report (on the basis of which EC dated 18.06.2019 was issued) and Consent to Establish dated 04.06.2021 and 04.12.2021 issued by OSPCB.
- ii. PP needs to explain whether there is any change in pollution load due to project activities in the context of variations in configuration of crushing and screening facilities in the project.

3.2.5. Recommendation of EAC

Deferred for ADS

4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Dr Dinesh Misra	IFS (Retired)	dmi*****@gmail.com	
2	Sh Niranjana Kumar Vasu	Member (EAC)	vas*****@gmail.com	
3	Dr Asha Rajvanshi	Member (EAC)	ash*****@gmail.com	
4	Shri Avijit Gosh	Member (EAC)	avi*****@gmail.com	
5	Shri Bandi Ramchandra Reddy	Member (EAC)	red*****@gmail.com	
6	Prof Pramod Kumar	Member (EAC)	nit*****@yahoo.com	
7	Prof Devesh Walia	Member (EAC)	dev*****@gmail.com	
8	Dr Suresh Tiwari	Member (EAC)	smb*****@gmail.com	
9	Dr K G Asha Manjari	Member (EAC)	kim*****@gmail.com	
10	Prof Dev Dutt Sharma	Member (EAC)	dds***@gmail.com	
11	Mr V K Soni Representative of IMD	Member (EAC)	vij*****@imd.gov.in	
12	Dr Y G Kale Representative of IBM	Member (EAC)	ygk***@ibm.gov.in	
13	Rajeev Ranjan	Scientist E	ran*****@nic.in	
14	Shri Saifulla Ansari	Member (EAC)	dir*****@gmail.com	

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

MINUTES OF THE 43rd MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 43rd meeting of the Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 22-23rd April 2025 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.

Corrigendum in the minutes of the 39th EAC Meeting held on 15th January, 2025

- (1.0) Limestone Mine (Block 3B2) for mining of Limestone with production capacity of 3.8 MTPA, Waste and Topsoil 4.887 Million M³ per annum in ML Area of 470.00 ha by M/s JSW Cement Ltd located near Village Sarasani, Tehsil Nagaur, District Nagaur, Rajasthan - For Extension of validity of EC Regarding.**

[Online Proposal No. IA/RJ/MIN/509467/2024, File No. J-11015/125/2018-IA. II (M), EIA Consultant M/s J. M. Environet Pvt. Ltd.]

The proposal was earlier appraised during the 39th EAC meeting held on 15.01.2025 wherein EAC recommended the validity extension of Environmental Clearance issued on 31.08.2020 for Limestone Mine (Block 3B2) for mining of Limestone with production capacity of 3.8 MTPA, Waste and Topsoil 4.887 Million M³ per annum in ML Area of 470.00 ha by M/s JSW Cement Ltd located near Village Sarasani, Tehsil Nagaur, District Nagaur, Rajasthan, as per EIA notification 2006 (as amended). However, validity duration of the EC was not specifically mentioned.

In view of the above, EAC in the 43rd EAC meeting held on 22-23 April 2025 **recommended** that an additional specific conditions shall be added at Agenda no. 1.7, Para 3 Specific Condition No. (ix) Page 149 of 272 Section no. 3.7.6.1 (specific condition) as specific condition no. ix as mentioned below in the 39th EAC minutes held during 15.01.2025:-

- ix. The EC shall be valid till 09.04.2053.

Deliberation & Circulation of Earlier Minutes

(1.0) Deliberation & Circulation on the Minutes of 42nd EAC (Non-Coal Mining) Meeting held on 25th March 2025.

Day-1 (22nd April, 2025, Tuesday)

1.1 Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha - For Terms of Reference reg.

[Online Proposal no. IA/OR/MIN/533149/2025, File No. 23 212/2018-IA.III (V), EIA Consultant - Wolkem India Limited]

The instant proposal is for Terms of Reference for Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	Bhadrasahi Iron and Manganese Ore Mine with production capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.	
Location	Village	Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha (RF)
	Tehsil/Taluka	Barbil
	District	Keonjhar
	State / UT	Odisha
	Latitudes	21 ⁰ 58'47.97120" to 22 ⁰ 01'40.35360"N
	Longitudes	85 ⁰ 21'26.50320" to 85 ⁰ 24'26.21880" E.

	Sol Topo sheet No.	F45H8 or 73F/8
Company's Name	The Orissa Minerals Development Company Ltd	
Accredited Consultant and certificate no. and Validity	Wolkem India Limited, NABET Certificate No: NABET/EIA/RA/24-27/ RA0361; Validity: 11.06.2027.	
KML file	Attached	
Seismic zone	II	

ii. Category details:

Category of the project	Category-A
Schedule No.	1 (a) (Mining of Minerals)
Mining lease Area (MLA) (in ha.)	998.70
General Conditions (if any)	Not Applicable

iii. ToR Details:

Project Proponent has obtained ToR vide F. No. 23-212/2018-IA.III (V) dated 23.11.2020.

PP has submitted that in light of MoEF&CC's Notification vide S.O. 221(E) dated 18th January 2021, it is stated that "Notwithstanding anything contained above, the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered for the purpose of calculation of the period of validity of Terms of Reference granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the said Terms of Reference shall be treated as valid."

Hence, in effect the validity of TOR expired on 31.03.2025.

- Project Proponent has submitted the Draft EIA & EMP Report to Odisha State Pollution Control Board, Bhubaneswar on 17.02.2021 along with requisite fees to conduct the Public Hearing (PH).
- Project Proponent has also collected the Environmental Baseline data during October'2019 to December'2019 and re-validation of the same by collecting fresh data during October'2022.
- However, conducting PH within the validity of TOR period could not be accomplished in spite of regular and repeated follow up with the concerned Officials in Govt. of Odisha. A chronology of events leading to efforts made for successful listing of PH date is brought out depicting the efforts made by M/s OMDL, M/s RINL (the holding company), offices of SPCB, Odisha, Office of Secretary Steel, Office of HSM, Gol, Office of MoS, Gol etc leading to declaration of PH on 07.02.2025.

- PH was scheduled on 26.03.2025. However, PH was postponed by the Office of Collector and District Magistrate, Keonjhar, vide no. 942/Judl., dated 25.03.2025.

iv. 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
I.		08.11.1941	Manganese	08.11.1941 to 30.09.1960	State Govt.	8.73 Sq. Miles
II.		09.04.1963	Manganese	01.10.1960 to 30.09.1980	State Govt.	7.11 Sq. Miles
III.	5058/III(A)MG-33/88	30.05.1988	Manganese	01.10.1980 to 30.09.1990	State Govt.	998.70 Ha
IV.	14180/III(A)SM11/98	15.11.2000	Iron & Manganese	01.10.1990 to 30.09.2010	State Govt.	998.70 Ha.
V.	1262/SM/III(A)SM-09/2013	06.02.2020	Iron & Manganese	01.10.2010 to 30.09.2030	State Govt.	998.70 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		
i	Not Available	08.11.1941	30.09.1960	Manganese	8.73 Sq. Miles
ii	09.04.1963	01.10.1960	30.09.1980	Manganese	7.11 Sq. Miles
iii	Not executed	01.10.1980	30.09.1990	Manganese	998.70 Ha.
iv	03.02.2001	01.10.1990	30.09.2010	Iron & Manganese	998.70 Ha.

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

Private land	58.012 Ha
Government land	8.408 Ha
Forest land	932.027 Ha
Total Mining lease area (MLA), ha	998.447 (As per DGPS), 998.700ha (As per RoR)
Private land for crusher, workshop & other infrastructure outside the MLA	0.0

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/ DMG)	Letter No.	RMP-2352 /2024- 25/ IBM_RO _ BBS
	Date	24.03.2025.
	Mineral & (Major/ Minor)	Major
	Mine Lease Area, Ha	998.700
	Validity	30.09.2030
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Fully- Mechanized	
Drilling/Blasting	<p>Yes Shot/blast holes in single/multi rows on staggered pattern</p> <p>Iron Ore</p> <p>Drill Depth: 9.9 m Drill Dia: 150 mm Charge/Hole: ~56.6 kg (slurry) Powder Factor: >6 t/kg Pattern: Staggered, Broad 'V'</p> <p>Explosive Type: Slurry Explosives</p> <p>Stemming Length:3m</p> <p>Manganese Ore</p> <p>Drill Depth: 6.6 m Drill Dia: 100 mm Charge/Hole: ~20.8 kg (slurry) Powder Factor: >5 t/kg Pattern: Staggered, Broad 'V'</p>	

	Explosive Type: Slurry Explosives Stemming Length:3m
Geological Reserves	Iron 81.21Million Tonnes & Mn 12.24 Million Tonnes
Mineable Reserves	Iron 77.046 Million Tonnes & Mn12.17 Million Tonnes
Breakup of Total Excavation (Topsoil/ OB/ SB/ IB/ Mineral Rejects/ Waste, MTPA)	3132800 TPA
Life of mine	43 years for iron ore section. 101 years for Manganese ore section
Mine Bench Height & Bench Width	Height & width of benches - Iron ore is 6m & 9m Height & width of benches Manganese ore 3m & 3 m
Details of ground water intersection	No
Individual bench slope	
Overall pit slope	45 deg
Details of existing/ proposed Crusher	Proposed 02(two) nos. of Crusher of 250 TPH each.
Mineral Beneficiation	No
RoM output size	
Transportation details including capacity of dumper/tipper, mode of transport and distance	By Road & Railways
Generation of Topsoil/OB & its Management during plan period & conceptual period	No Topsoil
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	As per approved Mine Plan

vii. Water requirement:

Total water requirement	200 m3/day	Fresh water	200 m3/day
		Treated water	---
Source	Water requirement for the proposed project for industrial purposes has been estimated to be 200 m3/day, whereas potable water demand has been estimated to be 150 m3/day. The water will be drawn from nearby pond / Suna Nadi (also called Kundru Nala) which a perennial stream flowing adjacent to the lease's southern and eastern boundaries and remaining 50 m3/day will be sourced from borewell/tubewell.		
Permission for withdrawal/ intersection along with details of grant and its validity	Under progress		

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

Particulars	Particular's Name	Distance & Directions
Village	Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha (RF)	Within M.L area
Town	Joda	1 KM
Highway	SH 108 NH 520	3.35 Km from the N lease area 2.7 K.M N
Interstate Boundary	Odisha-Jharkhand interstate boundary	10.8 KM
Railway Station/ Railway line	Banspani Railway Station	2.90 Km in ESE
Water Bodies	<ol style="list-style-type: none"> 1. Suna Nadi 2. Karo River 3. Baitarani River 4. Suna Nala 5. Kundru Nala 6. Dalki Nala 7. Kakarpani Nala 8. Kalmang Nala 9. Topadihi Nala 10. Gamle Nala 	<p>Within ML E. 6.94KM NW 6.21KM E 3.18KM S Within ML S 2.28KM ENE 5.54KM SE 4.72KM S 5.79KM SW 5.49KM W 5.61KM WNW</p>

Forest	1. Sidhamatha R.F.: M.L. 2. Baitarani R. F.: 3. Thakurani R. F. 4. Lakhraghat R.F. 5. Karo R.F. 6. Chamakpur R.F. 7. Mendhamaruni R.F.	Within this R.F. Adjacent on SE 2.7 km N 1.2 km W 9.6 km NW 7 km SE 9.5 km SW
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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	Yes	PP has obtained Forest Clearance vide letter no.8-118/96-FC dated 26.02.1998 over 702.053ha.
National Park	NO	The PP has submitted an authenticated map of Orissa showing the distance of the Bhadrasahi Iron & Manganese Mine of M/s O.M.D.C. Ltd. (In Keonjhar District Of Orissa) from the National Park/ Sanctuaries and Elephant/ Tiger Reserve and their corridors.
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	PP has submitted approved Site Specific wildlife Conservation Plan by PCCF (WL) vide letter no.7487/1WL(CC) SSP-281/2012 dated 30.09.2014.
Wildlife Conservation Plan	Yes	PP has submitted approved Site Specific wildlife Conservation Plan by PCCF (WL) vide letter no.7487/1WL(CC) SSP-281/2012 dated 30.09.2014.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Area 18 Ha, sapling 28800
Budget for green plant & plantation till the end of life of mine.	1 Cr & As per E.C conditions
Budget for nursery	50 Lakhs
Details of existing plantation and its survival rate	80 %
No. of tree cuts in the mine lease area and compensatory afforestation	As per F.C
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	

50 m safety zone of nallah, roads, electric lines	Plantation will be as per approved Mining Plan
500 m safety zones of nearest habitation villages	

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	2025
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post Monsoon
Predominant Wind direction (From)	
Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	8
Soil Quality (no. of locations) and results	6
Hydro geological study and results	In Post monsoon 2025
Traffic study (no. of locations) and results	In Post monsoon 2025

xii. Certified Production Details from the inception of the mine:

Particulars	Details of Letter along with date of grant and validity		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Year	Production in MT	
		Iron Ore	Manganese Ore
	1989-90	124736.160	22971.000
	1990-91	142468.930	30089.000
	1991-92	117467.940	31829.000
	1992-93	128050.360	46535.537
	1993-94	32340.000	39481.200
	1995-96	66008.000	39812.500
	1996-97	80017.720	60923.523
	1997-98	142416.000	94205.000
	1998-99	77646.910	42019.480
	1999-00	94793.000	34265.000
	2000-01	52110.000	9630.000
	2001-02	0.000	35775.000

	2002-03	0.000	34948.000
	2003-04	533692.000	52550.000
	2004-05	639200.000	27234.000
	2005-06	480730.000	18985.000
	2006-07	744450.000	16102.000
	2007-08	1433000.000	21304.000
	2008-09	575400.000	62890.000
	2009-10	299950.000	19150.000
	2010-11	23538.0000	13225.000
	2011-25	0.000	0.000

xiii. Rehabilitation & Resettlement (R&R):

R & R details	Not applicable
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xiv. Court case details:

Court Case, No and its present status	Case 2(C) CC No.-98/2013 Pending JMFC- Barbil.
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xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent has submitted the affidavit vide letter dated 07.04.2025
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xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
	3.0	100

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	4.0 (Approx)
Project Cost	133.59
Employment (No.s)	163

3. Observation and Recommendation of the Committee:

The Expert Appraisal Committee (EAC) deliberated on the proposal for Terms of Reference (ToR) for the Bhadrasahi Iron and Manganese Ore Mine with production

capacity of Iron Ore 1.8 MTPA and Manganese Ore of 0.12 MTPA in the Mine Lease area of 998.70Ha by M/s Orissa Mineral Development Company Ltd, located at Villages Kolha Roida, Bhuyan Roida, Kundrupani, Chattabara, Bichakundi & Sidhamatha R.F., Tehsil Barbil, District Keonjhar, Odisha.

During the deliberations before the EAC of the NCM sector, it was noted that the mining lease area covers a total of 998.447 ha, according to DGPS, with a breakdown of 58.012 ha of private land, 8.408 ha of government land, and 932.027 ha of forest land. The infrastructure required for the project, such as crushers and workshops, will be situated entirely within the lease area, with no private land being used outside of this. The mining method proposed is opencast, fully-mechanized, involving drilling and blasting for both iron ore and manganese ore. As per the PP the reserves of iron ore stand at 81.21 million tonnes, and manganese ore reserves at 12.24 million tonnes. The mine will be operated with varying bench heights and widths, with an overall pit slope of 45 degrees to ensure safety during excavation.

PP reported that the mining operation will employ two crushers, each with a capacity of 250 TPH, and the transportation of materials will be carried out through both road and rail. The water requirement for the project has been estimated at 200 m³/day, with the primary source being the Suna Nadi stream, located near the southern and eastern boundaries of the lease area. Additionally, 50 m³/day will be sourced from borewells. The Project Proponent is in the process of obtaining the necessary permissions for water withdrawal. The total annual excavation will generate about 3.13 million tonnes of material, which includes mineral rejects and waste. These materials will be managed as per the approved mining plan, with no topsoil expected to be generated.

The project is located near various water bodies such as the Suna Nadi, Karo River, and Baitarani River, and within several forest reserves like Sidhamatha and Baitarani R.F. However, the area is not situated near any national parks, wildlife sanctuaries, or elephant/tiger reserves. In terms of ecological sensitivity, it was confirmed that no eco-sensitive zones or protected areas are within the vicinity. A detailed wildlife conservation plan has been approved, ensuring the project addresses any potential environmental impacts.

PP submitted that the mining operation will adhere to the guidelines provided under the Forest Clearance, including compensatory afforestation, and will avoid unnecessary tree cutting. As per the PP, the capital cost for the Environmental Management Plan (EMP) is estimated to be 4.0 crores, with an annual recurring cost of 1.0 crore. In terms of project costs, the overall estimate stands at 133.59 crores, and the mine will provide employment to 163 individuals, contributing to the local workforce.

The Project Proponent (PP) informed the EAC that they had previously obtained the Terms of Reference (ToR) for the project under the Ministry's notification S.O. 804 (E) dated 14.03.2017, via letter no. 23-212/2018-IA.III(V) dated 23.11.2020. The ToR was issued under the violation category, with its validity expired on 31.03.2025. The PP further submitted that, in accordance with the expiration of the ToR, they have submitted an application for fresh ToR through the Parivesh portal on 08.04.2025.

The EAC acknowledged the PP's submission and enquired why the EC application was not submitted within the stipulated time. The PP responded by stating that the public hearing for the project had been deferred multiple times by the State Authorities, which ultimately prevented them from submitting the Environmental Clearance (EC) application. The PP added that after completing the EIA-EMP report, they had made repeated requests to the State Pollution Control Board (SPCB) and District Authorities for scheduling the public hearing. However, they were not provided with a specific date for the hearing. The PP further mentioned that in March 2025, the State Authorities had informed them that the public hearing was scheduled for 26.03.2025, just five days before the expiry of the ToR. Unfortunately, this schedule was also cancelled by the District/ State Authorities.

In response to the submission, the EAC noted that the Ministry had granted the ToR under the violation notification S.O. 804 (E) dated 14.03.2017, which had a special window period. Since the window period for this notification had now passed, the EAC highlighted that the matter could no longer be considered under the said notification.

In view of the above, EAC decided to **return the proposal in its present form**, as the project does not meet the required conditions for further consideration under the existing guidelines and judicial orders.

1.2 Limestone Mine with production of 5.64MTPA in the ML area of 889.77ha by M/S RCCPL Private Ltd located at village Jamuani Khurd, Chari, Durjanpur, and Padrehi, in District Katni, Madhya Pradesh - For Amendment in Environmental Clearance reg.

[Online Proposal No. IA/MP/MIN/533338/2025, File No. J-11011/252/2009-IA-II (I), EIA Consultant - Perfact Enviro Solutions Pvt. Ltd.]

The instant proposal for Amendment in Environmental Clearance for Limestone Mine with production of 5.64MTPA in the ML area of 889.77ha by M/s RCCPL Private Ltd located at village Jamuani Khurd, Chari, Durjanpur, and Padrehi, in District Katni, Madhya Pradesh.

The EC for the mine has been transferred to M/s RCCPL Pvt. Ltd. Vide F.No. J-11011/252/2009-IA-II (I) dated 20.01.2025. The project proponent has proposed the following amendments:

S.No.	As per the EC	Amendment proposed by PP
1.	The entire limestone production of 5.64 MTPA was proposed to be transported from the crusher to the cement plant through the conveyor belt.	The whole limestone production of 3 MTPA is proposed to be transported from the crusher to another existing Sadhera mine of proponent (RCCPL Private Ltd.), which is located at about 13.5 km from the mining lease.
2.	The EC was granted for a production capacity of 5.64MTPA	A reduced production capacity of 3 MTPA is requested.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	Limestone Mine having lease area of 889.76 Ha by RCCPL Private Limited.	
Location	Village	Jamuwani Khurd, Chari, Durjanpur, and Padrehi
	Tehsil/Taluka	Vijayraghavgarh
	District	Katni
	State / UT	Madhya Pradesh
	Latitudes	24°03'42.507"N to 24°06'38.69
	Longitudes	80°39'40.480"E to 80°43'3.432
	Sol Topo sheet No.	G44U12
Company's Name	RCCPL Private Limited	
Accredited Consultant and certificate no. and Validity	Perfact Enviro Solutions Pvt Ltd. NABET/EIA/2225/RA 0284 (Rev. 01) valid upto 26.11.2025	
KML file	Attached	
Seismic zone	II	

ii. Category details:

Category of the project	A
Schedule No.	1 (a) -Mining of mineral
Mining lease Area (MLA) (in ha.)	889.76
General Conditions (if any)	Not Applicable

iii. EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of the accord
03/12/2010	IA/MP/IND/3723/2010	-	F.No.J-11011/252/2009-IA-II(I)	03/05/2011
24/04/2018	IA/MP/IND/73595/2011	-	F.No.J-11011/252/2009-IA-II(I)	07/08/2018
01/12/2023	IA/MP/MIN/443201/2023	-	F.No.J-11011/252/2009-IA-II(I)	20/01/2025

iv. Details of Mine Lease in a 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.	Original lease granted	26.03.2011	Major	30 years from the date of grant of issuance	State Government of Madhya Pradesh	889.76
2.	Lease Transfer Deed	17.05.2023	Major	30 years, will be extended up to 50 years as per MMDR Act	State Government of Madhya Pradesh	889.76

S. No	Details of the grant of the Mine Lease deed execution	Period of Grant		Name of the Mineral	Mine lease area in Ha
		From	To		
1	F 3-4/2009/12/2	11/11/2011	10/11/2041	Limestone	889.76

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

Private land	856.21 Ha
Government land	33.55 Ha
Forest land	00
Total Mining lease area (MLA), ha	889.76
Private land for crusher, workshop & other infrastructure outside the MLA	NA

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by the Indian Bureau of Mines/DMG)	Letter No.	MP/Katni/Limestone/RMP-33/2022-23/2367
	Date	18.08.2022
	Mineral & (Major/Minor)	Major
	Mine Lease Area, Ha	889.76
	Validity	Period from 2021-22 to 2025-26
Additional information (if any)	NA	
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized mining	
Drilling/Blasting	Fully Mechanized open-cast mine using HEMM and deep hole drilling-blasting.	
Geological Reserves	444.86 MT (Geological resources)	
Mineable Reserves	142.16 MT	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation- 5.04 million TPA (Comprising 3.00 million TPA of limestone, 2.04 million TPA of Waste, including Soil).	
Life of mine	50 Years	
Mine Bench Height & Bench Width	The height of the bench is 8 m, working width 20 m to 25 m	
No. of Mine Benches	5	
Existing Depth, m bgl	3.2 m bgl to 18 m bgl	
Ultimate Depth of Mining, m bgl	40 m bgl.	
Ground Water Table, m bgl	38 to 45 m bgl	
Details of groundwater intersection	There may be no water table intersection; a detailed hydrogeological report will be prepared.	
Individual bench slope	70°	
Overall pit slope	45°	
Details of existing/ proposed Crusher	A 900 TPH Crusher will be installed within the mining lease area.	
Mineral Beneficiation	NA	
RoM output size	70 mm	
Transportation details, including the capacity of the dumper/tipper, the mode of transport, and the distance	About 4 dumpers (60 tons capacity) for internal transportation and 15 dumpers (38 tons capacity) will be required for the transportation of limestone from the crusher to the existing mine of the same company, which is located at about 13.5 km.	

Generation of Topsoil/OB & its Management during the plan period & conceptual period	Max. 2011475 Tons per annum of waste and Max 26712 TPA of topsoil will be generated, which will be removed separately and stored at the place earmarked for it. Soil will be used for green belt development. The waste dump will be suitably planted with trees and shrubs.
Generation of Mineral Rejects/ Waste & its Management during the plan period & conceptual period	There will be no rejection from the mine.

vii. Water requirement:

Total water requirement	24 KLD	Drinking and Sanitation	4 KLD
		Mine operation	2 KLD
		Dust suppression	13 KLD
		plantation	5 KLD
Source	Total water requirement for the mine will be around 24 KLD, which will be sourced through the mine pit water and borewell (20 KLD of mine pit water, 4 KLD of Fresh Water from the borewell for domestic use).		
Permission for withdrawal/ intersection, along with details of the grant and its validity	There will be intersection of groundwater in the next 5 to 10 years as the water level is in a range of 38 m bgl to 45 m bgl, whereas the ultimate pit depth is about 40 m bgl		

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

Particulars	Particular's Name	Distance & Directions
Village	Jamuwani Khurd	Near the project Boundary
Town	Kaymur	5.50 Km SW
Highway	NH-30 (Topo Map in NH-7)	6.97 Km NW
Interstate Boundary	NA	NA
Railway Station/Railway line	Jhukehi Railway Station	24.85 km WSW

Water Bodies	Jarjarar Nala	0.19 Km ESE
	Pond near Durjanpur	0.83 Km SSE
	Pond near karitalai	1.66 Km South
	Laalti Kund	1.78 Km WNW
	Jhapawan Nala	2.56 Km South
	Pond near Kymore	3.52 Km WNW
	Pond near Bamhour	3.74 Km ESE
	Pond near Paraswara	4.27 Km SSE
	Tons or Tamasa River	4.48 Km NNW
	Pond near Harduwa	5.86 Km ESE
	Chakdahi Nala	5.99 Km ENE
	Mahanadi River	7.57 Km South
	Kalindari N	8.15 Km ENE
	Saguhai Pond	8.48 Km WSW
	Domna Nala	8.53 Km ESE
	Ghusru N	9.49 Km North
	Ban Sagar lake	10.76 Km ESE
Forest	Hardua Reserved Forest	4.67 Km SE
	Banjari Reserved Forest	6.21 Km SW

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 Letter no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh that No forest land is involved within the Mine lease area.
National Park	No	Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh that No National Parks, Wildlife Sanctuaries, Elephant Corridors, Biosphere Reserves, etc. within 10 km radius of the Mine lease area of M/s RCCPL.
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	Project Proponent vide letter dated 23.04.2025 requested to DFO, Katni, Madhya Pradesh to submit an authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Act of 2022. Pavo cristatus (Indian Peafowl) as per authenticated Conservator of Forest letter no. 1581 dated 28.02.2011.
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x. Green belt/ plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	At the end of mining, out of the total mined-out area, 122.20 ha of area will be afforested. It is proposed to plant about 3, 05,500 saplings in our Mines Lease area. Survival rate: 80%
Budget for green plant & plantation till the end of life of mine.	Rs 957 Lacs
Budget for nursery	Nil
Details of existing plantation and its survival rate	2100 (survival rate is 80 %)
No. of tree cuts in the mine lease area and compensatory afforestation	2800 trees will be cut in the mine lease. A total of about 3, 05,500 saplings will be planted up to the conceptual period.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	63.24 ha
50 m safety zone of nallah, roads, electric lines	NA
500 m safety zones of nearest habitation villages	NA

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	15 February to 15 March 2025
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season(One Month data)
Predominant Wind direction (From)	NW

<p>Ambient Air Quality (no. of locations) and results</p>	<p>No. of locations - 8 Locations were as follows: A1 - Padrehi (Onsite) A2 - Jamuwani Khurd A3 - Ghorbai A4 - Chari A5 - Durjanpur A6 - Karitalai A7 - Manaura A8 - Tikat Results- The ambient air quality results are summarized below : A1- Padrehi:- The mean value of PM10 is 75.73 µg/m3, PM2.5 range is 24.49 µg/m3, SO2 range is 8.46 µg/m3, NO2 range is 16.85µg/m3 & CO range is 0.51 mg/m3, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Padrehi village is found to be Satisfactory during the sampling campaign. A2- Jamuwani Khurd:- The mean value of PM10 is 80.22 µg/m3, PM2.5 range is 25.94 µg/m3, SO2 range is 8.96 µg/m3, NO2 range is 17.84 µg/m3 & CO range is 0.54 mg/m3, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Jamuwani Khurd village is found to be Satisfactory during the sampling campaign. A3- Ghorbai:- The mean value of PM10 is 89.99 µg/m3, PM2.5 range is 29.40 µg/m3, SO2 range is 10.15 µg/m3, NO2 range is 20.23 µg/m3 & CO range is 0.61 mg/m3, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Ghorbai village is found to be Satisfactory during the sampling campaign. A4- Chari:- The mean value of PM10 is 71.40 µg/m3, PM2.5 range is 23.08 µg/m3, SO2 range is 7.97 µg/m3, NO2 range is 15.88 µg/m3 & CO range is 0.48 mg/m3, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Chari village is found to be Satisfactory during the sampling campaign. A5- Durjanpur:- The mean value of PM10 is 89.96 µg/m3, PM2.5 range is 28.92 µg/m3, SO2 range is 11.11 µg/m3, NO2 range is 22.12 µg/m3 & CO range is 0.66 mg/m3, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Durjanpur village is found to be Satisfactory during the sampling campaign.</p>
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	<p>A6- Karitalai:- The mean value of PM10 is 83.57 µg/m³, PM2.5 range is 27.43 µg/m³, SO₂ range is 11.11 µg/m³, NO₂ range is 18.87 µg/m³ & CO range is 0.66 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB the air quality of the Karitalai village is found to be Satisfactory during the sampling campaign.</p> <p>A7- Manaura:- The mean value of PM10 is 89.01 µg/m³, PM2.5 range is 30.52 µg/m³, SO₂ range is 10.54 µg/m³, NO₂ range is 21 µg/m³ & CO range is 0.57 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Manaurai village is found to be Satisfactory during the sampling campaign.</p> <p>A8- Tikat:- The mean value of PM10 is 89.55 µg/m³, PM2.5 range is 28.95 µg/m³, SO₂ range is 10.01 µg/m³, NO₂ range is 19.92 µg/m³ & CO range is 0.60 mg/m³, which are within the limits of NAAQS. As per the Air Quality Index by CPCB, the air quality of the Tikat village is found to be Satisfactory during the sampling campaign.</p>
Noise level (no. of locations) and results	<p>No. of locations - 11</p> <p>Locations were as follows:</p> <p>N1 - Padrehi</p> <p>N2 - Chari</p> <p>N3 - Kymore to Bhandanpur PWD Road</p> <p>N4 - Dhawal</p> <p>N5 - Dhanwahi</p> <p>N6 - Jamuwani Khurd</p> <p>N7 - Durjanpur</p> <p>N8 - Karitalai</p> <p>N9 - Paraswara</p> <p>N10 - Basaundha</p> <p>N11 - Tikat</p> <p>Results-</p> <p>Core Zone (Industrial Area): N1 & N2: The ambient noise level during daytime at the proposed project site varies from 39.5 dB (A) to 42.5 dB (A), which are within the standard limit of the Industrial area, ~ 75 dB (A). During night, the noise level at the project site ranges from 35.2 dB (A) to 39.3 dB (A), which are within the standard limit of Industrial area 70.0 dB (A).</p> <p>Buffer Zone:</p> <p>Commercial Area: N3- The ambient noise level during daytime at the commercial area is 61.6 dB, which is within the standard limit of the commercial area, ~ 65 dB (A). During the night, the</p>

	<p>noise level at the commercial area ranges is 56.7, which is slightly higher than the standard limit of commercial area 55 dB (A).</p> <p>Residential Area: N4 to N11- The ambient noise level during daytime at the residential area varies from 40.1 dB (A) to 49.7 dB (A), which are within the standard limit of residential area ~ 55 dB (A). During night, the noise level at the residential area ranges from 35.7 dB (A) to 40.8 dB (A), which are within the standard limit of a residential area of 45 dB (A).</p>
Water Quality (no. of locations) and results	<p>No. of GW locations - 9 No. of SW locations - 5</p> <p>Locations for Groundwater-</p> <p>GW1- Padrehi GW2- Ghorbai GW3- Chhari GW4- Durjanpur GW5- Manaura GW6- Horaiya GW7- Karitalai GW8- Paraswara GW9- Kherhal</p> <p>Locations for Surface water-</p> <p>SW1- Pond near Chari SW2- Pond near Manaura SW3- Jhapawan Nallah SW4-Mahanadi River-Upstream of intake point SW5-Mahanadi River-Downstream of intake point</p> <p>GW Results-</p> <ul style="list-style-type: none"> ❖ The Total Dissolved Solids (TDS) of the sampling locations W1 to W9 range from 271 mg/l to 635 mg/l, which are found within the drinking water standard of Permissible limit (IS:10500), i.e., 2000 mg/l. ❖ The Total Hardness of the sampling locations ranges from 200 mg/l to 484 mg/l, which are found within the drinking water standard of the Permissible limit (IS: 10500), i.e., 600 mg/l. ❖ The Alkalinity of the sampling locations ranges from 186.20 mg/l to 436 mg/l, which are found within the drinking water standard of the permissible limit (IS: 10500), i.e., 600 mg/l. ❖ The Fluoride content in the sampling locations ranges from 0.01 mg/l, which is below the detection limit, the drinking water standard of the Permissible limit (IS:10500) i.e. 1.5 mg/l.

	<p>❖ The Calcium Concentration of sampling locations ranges from 48 mg/l to 96 mg/l. Calcium levels of sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 200 mg/l.</p> <p>❖ The Magnesium Concentration of sampling locations ranges from 19 mg/l to 52 mg/l. Magnesium levels of sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 100 mg/l.</p> <p>❖ The Chloride Concentration of all the sampling locations ranges from 71 mg/l to 133 mg/l. Chloride levels of all the sampling locations are within the drinking water standards of Permissible limit (IS:10500) i.e. 1000 mg/l.</p> <p>SW Results-</p> <p>Surface water samples were derived from 5 locations in different surface water bodies within study area, analysis results of the same revealed that pH values amongst all samples varied in the range of 7.04 - 7.97, Total Hardness concentration varied in the range of 56 mg/l to 304 mg/l & TDS concentration varied in the range of 93 to 432 mg/l. Electrical Conductivity was found to be ranging in between 143 to 664 mS/cm, BOD concentration varied in the range of 1.35 mg/l to 2.5 mg/l, DO concentration varied in the range of 3.3 mg/l to 5.7 mg/l,</p> <p>The surface water samples fall under classes B, C, and E (i.e., B- Water is suitable for Outdoor bathing, C- Drinking water source after conventional treatment and disinfection, and E- Irrigation, Industrial Cooling, Controlled Waste disposal) as per CPCB surface water criteria.</p>
Soil Quality (no. of locations) and results	<p>No. of locations - 10</p> <p>Locations were as follows:</p> <p>S1- Chari</p> <p>S2- Jamuwani Khurd</p> <p>S3- Padrehi</p> <p>S4- Durjanpur</p> <p>S5- Karitalai</p> <p>S6- Dhanwahi</p> <p>S7- Horaiya</p> <p>S8- Paraswara</p> <p>S9- Near Karitalai Village</p> <p>S10- Kherhal</p> <p>Results-</p> <p>Core Zone: The samples collected from the core zone sites show that the soil texture in the core zone is Clay, Color is 6/4</p>

	<p>Dull Orange and 5/2 Greyish Brown, pH is between 6.77 - 7.28 Amount of primary nutrients like Organic matter is 1.20 - 1.43 %, the available nitrogen 110.6 to 124.6 mg/kg is low and available Potassium 16.9 to 29.9 mg/kg is low while the available Phosphorus 5.2 to 8.8 mg/kg is in low to medium range. Thus, it can be concluded that the soil is average fertile in the Core Zone.</p> <p>Buffer Zone: The samples collected from the buffer zone sites show that the soil texture in the buffer zone is Silt Loam, Silty Clay Loam, Clay, Silty Clay, sandy Loam Color is 6/3 Dull Orange, 7/2 Light Brownish Grey, 6/2 Greyish Brown, 7/1 Light Brownish, 5/4 dull Reddish Brown pH ranges from 6.84 to 7.78. Amount of primary nutrients like Organic matter 1.13 to 2.80 %, the Available Nitrogen 92.60 mg/kg to 198.40 mg/kg is medium in range, the Available Phosphorus 4.3 mg/kg – 17.6 mg/kg is low to high in range, Available Potassium 21.70 mg/kg to 71.6 mg/kg is low to medium in range, Primary nutrient profile shows that soil is average fertile due to the availability of low amount of nitrogen, available potassium.</p>
Hydro geological study and results	There may be an intersection of the water table, as the minimum level of the water table is 38 to 45 m bgl, as per the approved mining plan. The ultimate level of excavation will be 40 m bgl. (The maximum depth of mine will be reached at the conceptual stage).
Traffic study (no. of locations) and results	<p>1- No. of locations</p> <p>Kymore to Bhandanpur PWD Road</p> <p>LOS of location (Kymore to Bhandanpur PWD Road) - is "A", and After Commissioning of the project LOS category of the Project will remain the same Category "A"</p>

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

Particulars	Details of the Letter, along with the date of grant and validity
Consent to Establish	PP has obtained CTE- Consent No:CTE-56700 grant consent up to dated Dt.20/09/2022
Consent to Operate	Pp has obtained the Consent No: AW-58912 grant consent up to dated 14/12/2025
Certified Production Details from the inception of the mine	Project Proponent has submitted the past production detail vide letter dated 06.01.2024 authenticated by

(in tabular form against the EC capacity)	Office of the Collector (Mineral Division), District-Katni, State-Madhya Pradesh
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xiii. Rehabilitation & Resettlement (R&R):

R & R details	Assets will be procured on a mutually agreeable basis keeping in mind the provisions of applicable Acts and Rules.
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xiv. Court case details:

Court Case, No and its present status	No pending litigations against the project.
Undertaking by Project Proponent w.r.t court case	Project Proponent has submitted an undertaking for No pending litigations against the project attached as Annexure VII in letter dated 23.04.2025.

xv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit vide letter dated 17.04.2025
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xvi. Details of the Environmental Management Plan (EMP): The Detail of EMP budget for EIA to mitigate the environmental impacts given below.

S.No.	Particulars	Capital Cost (Lakhs)	Annual recurring cost (Lakhs)
1	*Pollution Control (Water Sprinkling, Retaining wall, Fencing, and Garland drain, Anti-smog gun, Bag filters, STP, CAAQMS etc.)	188	78
2	Environment Monitoring	-	7.0
3	Green Belt within the ML area	957	43
	Total	1145	128.00

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP)	EMP Cost (Capital) -Rs 1145 Lakhs
Project Cost	Rs 204.04 Crores
Employment (Nos)	107 nos.

3. Observation and Recommendation of the Committee:

The instant proposal is for amendment of Environmental Clearance for Limestone Mine with production of 5.64MTPA in the ML area of 889.77ha by M/s

RCCPL Private Ltd located at village Jamuani Khurd, Chari, Durjanpur, and Padrehi, in District Katni, Madhya Pradesh.

As part of the deliberations of the Expert Appraisal Committee (EAC) of the Non-Coal Mining (NCM) sector, the Committee noted the chronology of the mining lease for the limestone project by M/s RCCPL in Katni district, Madhya Pradesh. The original mining lease was granted on 26.03.2011 for a period of 30 years over an area of 889.76 ha. Subsequently, the lease was transferred through a deed dated 17.05.2023, and as per the provisions of the MMDR Amendment Act, 2015. The lease deed was executed on 11.11.2011 and is valid till 10.11.2041. The mining lease area comprises 856.21 ha of private land and 33.55 ha of government land; no forest land is involved.

The mining plan, including the progressive mine closure plan, was approved by IBM under Letter No. MP/Katni/Limestone/RMP-33/2022-23/2367 dated 18.08.2022. The approved plan covers the period 2021–22 to 2025–26 and proposes opencast, fully mechanized mining involving HEMM and deep-hole drilling and blasting. The geological resources are estimated at 444.86 million tonnes, with mineable reserves of 142.16 million tonnes. The mine will operate with a total excavation of 5.04 MTPA (comprising 3.00 MTPA of limestone and 2.04 MTPA of waste), with a projected life of 50 years. The mine will reach an ultimate depth of 40 m bgl, while the groundwater table ranges between 38–45 m bgl; intersection with groundwater is anticipated in 5–10 years. A 900 TPH crusher is proposed within the lease area, and about 19 dumpers of 38–60T capacity will be used for internal and external transport.

The total water requirement is 24 KLD, sourced from mine pit water (20 KLD) and borewell water (4 KLD). No forest land or protected areas fall within the mine lease area, and there are no notified eco-sensitive zones, wildlife sanctuaries, or national parks within 10 km. However, Indian Peafowl (*Pavo cristatus*), a Schedule-I species, has been reported in the study area. The project proponent has submitted a request to the DFO, Katni, for an authenticated list of flora and fauna in compliance with the Wildlife (Protection) Amendment Act, 2022.

The greenbelt and plantation plan proposes afforestation of 122.20 ha of mined-out area with 3,05,500 saplings by the conceptual period, with an estimated budget of ₹957 lakh. Around 2800 trees are to be felled, and compensatory afforestation will be carried out. The plantation will cover 63.24 ha in the 7.5 m barrier and non-mineralized zone.

Baseline environmental monitoring was conducted between 15 February to 15 March 2025 during the summer season. Ambient air quality was monitored at 8 locations and found to be within the NAAQS limits. PM₁₀ values ranged between ~71 µg/m³ to ~90 µg/m³, and air quality across all locations was assessed as "Satisfactory" as per CPCB's AQI. Noise monitoring at 11 locations revealed that levels in industrial, residential, and commercial zones were generally within prescribed limits, with a slight exceedance during night-time at the commercial site. Groundwater and surface water

quality samples collected from 14 locations indicated that the physico-chemical parameters were within permissible limits for drinking water, with TDS values in groundwater ranging from 271 to 635 mg/l.

The Project Proponent has stated that the combined environment clearance for both proposed Cement Plant and the Mine, granted to M/s Sanghi Infrastructure M.P. Ltd. for mine lease area of 889.76ha on 26.03.2011 in favour of M/s Sanghi Infrastructure M.P. Ltd. The Environmental Clearance (EC) for the mine was officially transferred to M/s RCCPL Pvt. Ltd on 20.01.2025.

Project Proponent has submitted an application for amendment in EC, as per the additional conditions no. (ii) and (iii) of the EC transfer letter dated 20.01.2025:

Additional conditions no. (ii) This transfer of EC is subject to appropriate amendments in EC dated 03.05.2011 that PP should take as there are scope changes in the EC. The Project Proponent (PP) must obtain an amendment to the EC dated 03.05.2011 for the transportation route where the ore from the mining project will be transported.

Additional conditions no. (iii) All conditions stipulated in the EC letter No. J-12011/252/2009-IA.II dated 03.05.2011 shall remain unchanged and binding. Project Proponent shall seek amendment in the EC from MoEFCC just after the transfer of EC in its name, for the conditions that has been redundant since Cement plant's validity has expired. Amendment in EC shall also be sought from MoEFCC for other scope and condition changes since the cement plant will not be established as envisaged.

The Project Proponent has sought the following amendments:

- a. The whole limestone production of 3 MTPA is proposed to be transported from the crusher to another existing Sadhera mine of proponent (RCCPL Private Ltd.), which is located at about 13.5 km from the mining lease.
- b. A reduced production capacity of 3 MTPA is requested.

Earlier, the Project Proponent had proposed to transport the mineral through a conveyor belt to the proposed cement plant located on adjacent land. However, the cement plant could not be established. Subsequently, the Project Proponent has proposed to transport the crushed limestone using tippers. The limestone will be transported by road over a distance of approximately 13.5 km from the project site to the Sadhera Limestone Mine.

The Project Proponent has also proposed to reduce the limestone production capacity from 5.64 million tonnes per annum (MTPA) to 3 MTPA. It has been submitted that this 47% reduction in production is expected to result in a corresponding decrease in pollution load.

The Committee advised the Project Proponent to carry out a fresh study to assess the environmental impact of road transportation over the proposed 13.5 km route. The earlier EIA-EMP report was based on the assumption that the mineral would be transported to the adjacent cement plant. However, the current proposal involves transportation by road through existing habitations. The Project Proponent is required

to evaluate the potential impact of such transportation on the population residing in close proximity to the existing road.

The Committee also advised the Project Proponent (PP) to prepare a plan for constructing a conveyor belt from the mine site to the Sadhera Limestone Mine and to submit a detailed feasibility report in this regard.

Additionally, the Committee directed the PP to obtain a certificate from the State Directorate of Geology and Mining (DMG) confirming that no mining activity is being carried out along the common boundary of adjacent leases. The Committee further observed that the nearest school is located at a distance of approximately 140 meters from the mine pit, and that habitations exist within a 500-meter radius. In view of this, the Committee recommended the adoption of blast-less technology for mining operations adjacent to habitations.

The Committee also advised the Project Proponent to conduct wildlife sampling within the 10 km study area and submit a detailed report.

In light of the above observations, the Committee **deferred** the proposal and requested submission of the following information:

- i. A detailed feasibility report for the implementation of a conveyor belt system from the mine site to the Sadhera Limestone Mine.
- ii. A Scientific study assessing the environmental impact of road transportation on nearby habitations and other sensitive receptors such as schools and hospitals and surrounding environment including flora and fauna.
- iii. Details of the instruments proposed to be used for monitoring of atmospheric aerosol called particulate matter: PM, air and water pollution, along with calibration certificates issued by the National Physical Laboratory, New Delhi.
- iv. A comprehensive traffic study report, including the number of vehicles to be deployed, their tonnage, capacities and diesel consumption estimates.
- v. A detailed report on the hardness and compressive strength of the rock, to assess the feasibility of implementing blast-less mining technology and the use of surface miner near existing habitations.
- vi. PP needs to submit the compliance of the additional condition no. 7 of EC transfer letter dated 20.01.2025, "Regional office of the Ministry may conduct site inspection of the project soon after issuance of the transfer of EC and check the compliances of EC conditions. PP should submit the site inspection report of Regional office with next six monthly compliance report".
- vii. PP needs to obtain a certificate from the State Directorate of Geology and Mining (DMG) confirming that no mining activity is being carried out along the common boundary of adjacent leases.

1.3 Expansion of Barsua-Taldih-Kalta Iron Mines from 8.05 MTPA to 16.0 MTPA (ROM), handling of 2 MTPA Sub-grade dumps/ Tailings and 3.92 MTPA

Topsoil/ OB/ IB (Total excavation 22 MTPA) and Dry Processing Plants of 7.0 MTPA for Taldih, 4 MTPA for Kalta, 3.5 MTPA Barsua Beneficiation Plant in the amalgamated mine lease area of 2558.581 ha, along with augmentation of associated infrastructure, in Koira Tehsil, Sundargarh District, Odisha. Amendment in Environmental Clearance reg.

[Online Proposal no. IA/OR/MIN/523449/2025, File No. J 11015/351/2006-IA-II (M), EIA consultant MECON Limited]

The instant proposal is for Amendment in Environmental Clearance for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years and 3 years for Taldih and Kalta Mines respectively, to commence the operation of Belt Conveyor and to continue road transportation to Railway Sidings during extended period. The proposal includes amendment in the lease area from 2564.323 ha to 2558.581 ha. This change in ML area is attributed to the surrender of 5.742 ha of forest land, and a Supplementary Lease Deed for the revised area has been executed on 14.11.2024..

As per existing EC condition, Project Proponent shall commence the operation of the conveyor belt within 2 years from the date of issue of EC dated 28.04.2023. The EC condition specifically stated that SPCB shall grant CTO upto 12 MTPA only till the installation of conveyer belt i.e. 4 MTPA production from Barsua, 2 MTPA from Taldih, 4 MTPA from Kalta and 2 MTPA Subgrade/ Tailings.

2. The details of Project submitted by the Project Proponent are given as under:
- i. Project details:

Name of the Proposal	Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines, seeking a time extension of 2 years for Taldih Mines and 3 years for Kalta Mine to commence the operation of Belt Conveyor from these mines, and to continue road transportation from Taldih Mines and Kalta Mines to Barsua and Roxy Railway Sidings respectively during the extended period. The proposal also includes the incorporation of total mining lease area as 2558.581 ha.	
Location	Village	Tantra & Bahamba and Toda Reserve Forest
	Tehsil/Taluka	Koira
	District	Sundargarh
	State / UT	Odisha
	Latitudes	21°49'25.43880" N to 21°59'50.88516" N
	Longitudes	85°07'43.73832" E to 85°13'53.48136" E
	Sol Topo sheet No.	73G/1 (F45N1)

Company's Name	Barsua-Taldih-Kalta Iron Mines, Steel Authority of India Limited
Accredited Consultant and certificate no.	MECON Limited, Ranchi has been engaged for baseline data generation and preparation of EIA-EMP report. Certificate No. NABET/EIA/24-27/RA 0342_Rev 01
KML file	Attached
Seismic zone	Seismic Zone II

ii. Category details:

Category of the project	Category "A"
Provisions	Project Activity '1 (a)' & '2 (b)'
Mining lease Area (MLA) (in ha.)	2558.581 ha

iii. EC Details: PP has obtained the Environmental Clearance vide letter no. F.No. J- 11015/351/2006-IA.II (M) dated 28.04.2023.

iv. Details of Mine Lease in Chronological manner:

ML detail	Date of the grant	Mine Lease Renewal Detail	
ML-130 lease (2486.383 ha)	1. Date of entering into Original lease deed: 06.01.1960. 2. Date of expiry of Original lease deed: 05.01.1990.	1. Date of 1 st lease renewal: 06.01.1990 2. Whether renewal or deemed renewal: Deemed renewal. 3. Date of expiry of 1 st lease renewal/deemed renewal: 05.01.2010.	1. Date of 2 nd lease renewal: 06.01.2010 2. Whether renewal or deemed renewal: Lease renewed and lease deed executed on 13.11.2014 3. Date of expiry of 2 nd lease renewal/deemed renewal: 05.01.2030
ML-162 lease (77.94 ha)	1. Date of entering into Original lease deed: 29.04.1960. 2. Date of expiry of Original lease deed: 28.04.1980.	1. Date of 1 st lease renewal: Applied 2. Whether renewal or deemed renewal: Renewed by Govt. of Odisha. 3. Date of expiry of 1 st lease renewal: 28.04.2000.	1. Date of 2 nd lease renewal: 21.04.1999 2. Whether renewal or deemed renewal: Lease extended up to 28.04.2030 and lease deed executed on 24.09.2016.

			3. Date of expiry of 2 nd lease renewal/deemed renewal: 28.04.2030
Amalgamation of ML-130 & ML-162 lease (2564.323 ha)	The above two mining leases (ML-130 & ML-162) were contiguous. Based on the SAIL's application, Dept. of Steel and Mines, Govt. of Odisha vide proceeding No. IV (B) SM-03/2020/10418/SM, Bhubaneswar, Dt. 02.12.2020, amalgamated the contiguous Mining Leases viz. ML-130 and ML-162 covering total area of 2564.323 ha having <u>validity up to 05.01.2030</u> . Lease deed of the amalgamated lease has been executed on 30.03.2021 and valid upto 05.01.2030.		
Amendment Lease Deed for 2558.581 ha.	In compliance to Specific Condition no. ii of EC, after careful consideration of SAIL's application, surrender of part area of 5.742 ha (out of the Amalgamated Mining Lease area over an area of 2564.323 ha) was accepted by Government of Odisha vide order dated 16.10.2023 under Rule 21(1) of MCR 2016 and SAIL is allowed to retain the balance area under their possession till expiry of the validity of the lease. Accordingly, Amendment Lease Deed (ALD) was executed on 14.11.2024 for the reduced area i.e., 2558.581 ha.		

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

Private land	24.014 ha
Government land	114.696 ha
Total Mining lease area (MLA)	2558.581 ha
Private land for crusher, workshop & other infrastructure outside the MLA	164.626 ha acquired area adjacent to Mining Lease area at Barsua Valley and ~6.475 ha at Roxy Rly. Siding for installation of various allied facilities and infrastructure.
Additional information (if any)	Township outside the lease area: Tensa Township = 140.377 ha Barsua Valley Township = 53.29 ha Kalta Township = 31.10 ha

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	RMP 2317/2024-25/ IBM_RO_BBS
	Date	26.12.2024
	Mineral & Major/Minor)	Iron Ore

	Mine Lease Area, Ha	2558.581 ha
	Validity	2025-26 to 2029-30
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Open Cast Mining	
Drilling/Blasting	Deep hole drilling of 110 and 150 mm diameter and blasting with ammonium nitrate and slurry explosives.	
Geological Reserves	693.31 Million Tonnes	
Mineable Reserves	663.94 Million Tonnes	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	<p>Iron ore production – 16.0 MTPA (ROM)</p> <p>Topsoil/OB/IB – 4.0 MTPA</p> <p>Mineral Rejects – 2.0 MTPA (Sub-grade dumps/Tailings)</p> <p>Total Excavation – 22 MTPA</p>	
Life of mine	40 years.	
Mine Bench Height & Bench Width	10 m & 10 m / 6 m & 6 m	
No. of Mine Benches	16	
Existing Depth, m bgl	170 m	
Ultimate Depth of Mining, m bgl	195 m	
Ground Water Table, m bgl	<p>Barsua Block : 404 m - 408 m AMSL</p> <p>Taldih Block : 587 m - 593 m AMSL</p> <p>Kalta Block : 580 m - 586 m AMSL</p>	
Details of ground water intersection	The mine working will not intersect ground water table.	
Individual bench slope	80°	
Overall pit slope	37°	

Details of existing/ proposed Crusher	<p>Existing Crusher</p> <p>Primary Crushers:</p> <p>2 x 700 TPH, 6 x 300 TPH</p> <p>Secondary Crushers:</p> <p>2 x 450 TPH, 1 x 300 TPH, 2 x 250 TPH, 1 x 200 TPH</p> <p>Proposed Crusher</p> <p>Primary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH, 1 x 300 TPH</p> <p>Secondary Crushers:</p> <p>1 x 1800 TPH, 1 x 900 TPH</p> <p>Tertiary Crusher</p> <p>1 x 1800 TPH, 1 x 900 TPH</p>
Mineral Beneficiation	The operation of wet beneficiation in the ore processing plant of Barsua is being continuing. Other two mines, Taldih & Kalta are being operated in dry mode without beneficiation.
RoM output size	Iron Ore up to 40 mm
Transportation details including capacity of dumper/tipper, mode of transport and distance	<p>Existing:</p> <p>Barsua Mine: 4.0 MTPA by conveyor to Barsua Rly. Siding and final dispatch by rail.</p> <p>Taldih Mine: 2.0 MTPA by Road to Barsua Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 11 km and final dispatch by rail.</p> <p>Kalta Mine: 4.0 MTPA by road to Roxy Rly. Siding by 10 to 25 tonner tippers / trucks over a distance of 22 km and final dispatch by rail.</p> <p>Proposed:</p> <p>Taldih Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2027 and continuation of</p>

	<p>road transportation to Barsua Railway Siding till that time.</p> <p>Kalta Mine: Permission is sought for time extension to commence the operation of Belt Conveyor by 27.04.2028 and continuation of road transportation to Roxy Railway Siding till that time.</p> <p>Barsua Mine: No Change in transportation mode.</p>
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>Top Soil: 59690.60 m³</p> <p>OB: 13279431.69 m³ during plan period.</p> <p>OB will be dumped in 5 nos. of waste dump.</p> <p>Part of OB will be used for backfilling in 2 areas at BIM & KIM.</p>
Generation of Mineral Rejects/Waste & its Management during plan period & conceptual period	<p>Mineral Rejects: 10134573 Tonne</p> <p>Dispatch for direct sale in open market for selling or to SAIL steel plants for captive use directly or through beneficiation & pellet conversion agencies for converting the low-grade fines to pellets & supplying entire converted pellets to SAIL steel plants for captive use.</p>

vii. Water requirement:

Total water requirement	8845 m ³ /day	Fresh water	7766 m ³ /day
		Treated water	1079 m ³ /day
Source	Kuradih Nalla for Barsua & Taldih Mines / Najkura Nalla for Kalta Mines		

Permission	<p>Department of Water Resources, Govt. of Odisha has permitted allocation of 3.406 cusec (~8333 m³/day) of surface water from Kuradih Nalla vide Letter no.4897/WR dated 15.02.2021. Renewal of Water agreement of Barsua & Taldih Mines for 3.406 cusec for the purpose of industrial and commercial use has been made with Water resource department on 06.01.2024 which is valid till 05.01.2027.</p> <p>In respect of Kalta Iron Mines, The permitted drawl quantity from Najkura Nalla is 24110 m³/month (~803 m³/day). Accordingly, Water Allocation order issued by Water Resource Department for 0.328 cusec on 14.08.2024. Subsequently, Water agreement for the purpose of industrial and commercial use has been made with Water resource department on 28.01.2025 which is valid till 27.01.2028.</p>
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viii. Nearest village/town/ highway/interstate boundary/railway station/water bodies/monument/ forest

Particulars	Particular's Name	Distance & Directions
Village	Tantra	Within Lease
Town	Koira	10 km
Highway	NH - 520	Passing through lease
Interstate Boundary	Odisha-Jharkhand Boundary	1.5 Km
Railway Station/Railway line	Barsua	1 Km
Water bodies	Samaj Nalla	Passing through lease
Forest	Toda RF	Within Lease

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	Yes	<p>Out of 2558.581 ha amalgamated lease area, 2419.871 ha is Forest Land (Toda R.F.). Stage-II forest clearance for diversion of forest land over 2341.931 ha in ML – 130 was granted by MoEFCC vide F. No. 8-90/1996-FC (pt.), dated 06.03.2013. MoEFCC vide order no. F.No.8-18/2014-FC dated 23.10.2017 granted Stage-II FC for diversion of entire 77.94 ha of forestland under ML-162 for development of mining infrastructure.</p> <p>PP submitted an authenticated map issued by the Office of the DFO, Bonai Division dated 06.04.2022. As per the authenticated map, there are no National Park/Wildlife Sanctuary/ Biosphere</p>
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	

Coastal Regulation Zone (CRZ)	No	Reserved/Tiger Reserve/Eco Sensitive Zone within 10 km radius. However, Karo-Karampada Elephant Corridor is located at a distance of 3.2 km
Schedule-I species (Nos. and name of Schedule-I species with authenticated letter)	Yes	Core Zone: None, Buffer Zone: Indian Elephant, Sloth Bear, Wolf, Sloth Bear
Wildlife Conservation Plan		Two Site Specific Wildlife Conservation Plans (SSWCP) were approved by Chief Wildlife Warden, Odisha vide dated 25.02.2013 for 2486.313 ha & 13.01.2016 for 77.94 ha. An amount of Rs.17.82 Crores & Rs. 9.84 Crores were deposited for implementation of approved SSWCPs in Buffer Zone of Barsua-Taldih-Kalta Iron Mines.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	1548.726 ha at the end of mining / 24,52,596 saplings
Budget for green plant & plantation till the end of life of mine.	Rs. 73,58,00,000/-
Budget for nursery	
Details of existing plantation and its survival rate	127.42 ha / 80 %
No. of tree cuts in the mine lease area and compensatory afforestation	
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	93.679 ha
50 m safety zone of Nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	

xi. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	Oct.- Nov.-Dec. 2024
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post Monsoon, 2024

Predominant Wind direction (From)	Overall - North followed by North-East [Source: IMD, Keonjhar]
Ambient Air Quality (no. of locations) and results	No. of locations: 6; Results: Air quality values are well within the norms.
Noise level (no. of locations) and results	No. of locations: 7; Results: Mean noise levels at all locations are well within the respective norms of the type of area.
Water Quality (no. of locations) and results	No. of locations: 9 [Surface Water - 6; Ground Water – 3]; Results: Surface Water can be classified as Class 'B' type [CPCB's Water Quality Criteria] Ground water quality at all locations are within IS:10500, (2012) limits
Soil Quality (no. of locations) and results	No. of locations: 2; Results: Soil samples are capable of retaining moisture, soil fertility is also good.
Traffic study (no. of locations) and results	No. of locations: 4; Results: Existing traffic load varies from 40% - 47% of existing road capacity. Level of Service – B & C.

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	PP has obtained the CTE vide Letter No.: 9222/IND-II-CTE-6910, Date: 07.06.2023
Consent to Operate	PP has obtained the CTO Letter No. 6964/IND-I-CON-1(A), Date: 31.03.2025, valid up to 31.03.2026
Certified Compliance Report and Inspection date	Certified EC compliance report has been issued by MoEFCC Regional Office, Bhubaneswar on 05.03.2025 and SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in CCR. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing Site inspection and issued comments on ATR submitted by M/s SAIL on 02.04.2025. Inspection date: 24.01.2025 and 25.01.2025 Re-Inspection date: 26.03.2025 and 27.03.2025

Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Memo No. 6522/Mines, dated 13.12.2019, Memo No. 4004/Mines, dated 22.10.2021 & Memo No. 2599/Mines, dated 13.09.2022 issued by Dy. Director of Mines, Koira Mining Circle, Koira	
	Year	EC sanctioned Capacity (in tonnes/ year)
	2011-12	80,50,000
	2012-13	80,50,000
	2013-14	80,50,000
	2014-15	80,50,000
	2015-16	80,50,000
	2016-17	80,50,000
	2017-18	80,50,000
	2018-19	80,50,000
	2019-20	80,50,000
	2020-21	80,50,000
	2021-22	80,50,000
	2022-23	80,50,000
	2023-24	1,60,00,000
	Actual production (in tonnes/ year)	
		26,87,921
		30,10,890
		28,64,831
		15,45,987
		12,67,840
		14,58,340
		21,33,560
		38,45,242
		46,99,847
		58,74,431
		69,74,691
		68,26,932
		69,80,529

xiii. Rehabilitation & Resettlement:

R & R details	Not Applicable as no private land acquired for the project nor there is any proposal to do so
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xiv. Court case details:

Court Case, No and its present status	<p>WP(C) No. 24282/2017</p> <p>Subsequent to the judgment of Apex Court dated 02.08.2017, the Governments of Odisha has issued demand notices to Barsua-Kalta Mines for payment of compensation towards excess production on or before 31st December 2017 against EC / CTO capacity. Dy. Director of Mines (DDM), Koira vide letter dated 02.09.2017 issued a demand notice for payment of Rs. 66,89,42,779.50/- in respect of Barsua/ Kalta Iron Mines to recover price of mineral produced without / beyond EC alone under Section 21 (5) of MMDR Act, 1957. The said amount was deposited on 29.12.2017 under protest. Further, letter No.5962/Mines dtd 24.10.2017 of DDM, Koira has directed to pay compensation of Rs.90,19,71,684.40/- for mining more than the permissible limit under the Consent to Operate. Against the above stated demands, SAIL had filed a Writ Petition bearing WP (C) No-24282/2017 in High Court of Odisha, Cuttack. The matter was heard,</p>
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	and Hon'ble High Court had passed the stay order on 04.04.2018 & matter is sub-judice.
Undertaking by Project Proponent w.r.t court case	PP has submitted an Affidavit vide letter dated 06.02.2025.

xv. Affidavit/ Undertaking details:

Affidavit/ Undertaking	PP has submitted an Affidavit vide letter dated 06.02.2025.
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xvi. Project Proponent has submitted the point-wise reply against the EDS raised on 21.02.2025 vide letter dated 10.03.2025 as mentioned below:

S. No.	Observation of MoEF	Reply by PP
I.	It has been noted that Regional office Bhubaneswar has done the site inspection of the project recently. PP should submit the site inspection / monitoring report of the Regional office w.r.to the compliance of EC conditions.	The Site Inspection of Barsua, Taldih & Kalta Iron Mines done by the Regional Office, MOEFCC, Bhubaneswar during 24 th & 25 th January, 2025 for reviewing & progress of jobs on the existing EC conditions. The Certified EC compliance report / Site Inspection / Monitoring Report have been issued on 05.03.2025. Subsequently, SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in CCR. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing Site inspection and issued comments on ATR submitted by M/s SAIL on 02.04.2025.
II.	PP should also submit the compliance of NEERI condition with regard to Suggested Ore Transport Mode (SOTM).	Amalgamated Barsua-Taldih-Kalta Iron Mining Lease (erstwhile ML -130 & ML-162 leases) spread over an area of 2558.581 ha comprises of three mines with their own quarries, mineral processing plants, mineral despatch facilities and other infrastructure. Mode of material transportation: - <ul style="list-style-type: none"> Entire ore from the Barsua is being transported by downhill conveyors from

		<p>mines to SAIL's Pvt. Barsua Railway Siding.</p> <ul style="list-style-type: none"> • In case of Taldih, the processed ore being transported by trucks to Barsua Railway Siding which is 11 km haulage of public road. • In case of Kalta the entire production is sent by trucks Roxy Rly. Siding. The haulage comprises. • ~4.0 km of internal roads and ~18 km of public roads (NH-520 which is a 4-lane road with a divider). <p>In compliance to the recommendation of NEERI on Suggested Ore Transport Mode (SOTM), evacuation of entire ore from Taldih & Kalta Mines through long distance belt conveyors (LDBC) to Railway Sidings at Barsua and Roxy respectively is envisaged under the 16 MTPA expansions of the mines. However, during the construction phase, Taldih Iron Mine shall continue to transport 2.0 MTPA of iron ore through existing transport road to Barsua Railway Siding and Kalta Iron Mines shall continue to transport 4.0 MTPA iron ore through existing transport road to Roxy Siding.</p> <p>The Iron Ore from Barsua Iron Mines is transported through Belt conveyor since beginning of the Mines. PP has submitted detail status report and action plan for installation of Long-Distance Belt Conveyor at Taldih and Kalta Iron Mine.</p>
III.	PP should submit a brief write-up and supporting geotagged photographs regarding the steps taken so that there is no spillage of mineral/ore during ore transportation through road.	<p>The following regular steps are being taken at Barsua-Taldih-Kalta Iron Mines during transportation of iron ore to prevent spillage during transportation:</p> <ol style="list-style-type: none"> 1. Checking of dumpers at security gate for any damaged body. 2. Covering of bottom of the dumper with tarpaulin.

		<p>3. Loading of dumpers with appropriate size of backhoe.</p> <p>4. Load Adjustment with the help of Weigh Bridge.</p> <p>5. Ore carrying dumpers are covered with tarpaulin sheets.</p> <p>PP has submitted Geotagged recent photographs (with date, time & location stamps) of the above measures in operation</p>
IV.	PP should submit copy of record of training details imparted to operators, supervisors, workers regarding steps to be followed to ensure that there is no spillage of mineral/ore during ore transportation through road.	PP has submitted a copy of record of training details imparted to drivers, operators, and supervisors.

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Pollution Control		
A. Water Pollution Control	16.00	190.00
B. Air Pollution Control	20.95	491.00
C. Solid Waste Management	0.55	40.00
Occupational Safety & Health	0.30	15.00
Green Belt development	73.58	0.00
Wildlife conservation & management	0.00	142.00
Pollution Monitoring	0.00	40.00
Rainwater Harvesting	0.50	5.00
Cost for Environmental Protection Measures (in Rs. Lakhs)	111.88	923.00

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of public hearing)	Rs. 133.76 Crores
Project Cost	Rs. 2740.88 Crores
Employment (Nos.)	1133

3. Observation and Recommendation of the Committee:

The Committee deliberated the proposal for Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines, which seeks a time extension of 2 years for Taldih Mines and 3 years for Kalta Mine to commence the operation of Belt Conveyor from these mines, and to continue road transportation from Taldih Mines and Kalta Mines to Barsua and Roxy Railway Sidings respectively during the extended period. The proposal includes amendment in the lease area from 2564.323 ha to 2558.581 ha. This change in ML area is attributed to the surrender of 5.742 ha of forestland, and a Supplementary Lease Deed for the revised area has been executed on 14.11.2024.

The Project Proponent and the Consultant presented the key site features through a KML file. PP informed that the total mining lease area has been revised from 2564.323 hectares, as mentioned in the existing Environmental Clearance (EC), to 2558.581 hectares in the present proposal. This reduction of 5.742 hectares is due to the surrender of forest land, and a Supplementary Lease Deed reflecting the revised area.

The Committee also observed that, as per the conditions stipulated in the existing EC dated 28.04.2023, the Project Proponent is required to commence the operation of the conveyor belt within two years from the date of EC issuance. Until the conveyor belt becomes operational, the State Pollution Control Board (SPCB) shall only grant Consent to Operate (CTO) for a capacity of up to 12 MTPA, comprising 4 MTPA from Barsua, 2 MTPA from Taldih, 4 MTPA from Kalta and 2 MTPA from Subgrade/Tailings. Accordingly, EAC asked the reasons for delay in installation of the conveyor belt. PP replied that there had been delays in finalizing the Mine Development Operator for both Taldih and Kalta mines.

PP added that they have issued a Letter of Award (LOA) on 27.09.2024 for the Taldih mine, and the Mine Service Agreement was executed on 20.11.2024. As informed, the development of the mine and installation of the conveyor belt are expected to take approximately two years. Accordingly, the Project Proponent has requested an extension of two years for commencement of the conveyor belt upto Barsua Railway siding. PP has also requested to permit transportation through road upto Barsua Railway siding till the commencement of the conveyor belt.

Further, in respect of Kalta Iron Mine, PP requested the Committee to provide a three-year extension for commencement of conveyor belt upto Roxy Railway Siding and to allow road transportation till then. EAC noted the submission of PP and enquired about seeking a three year time period whereas for Taldih mine PP is seeking two years.

PP submitted that conveyor belt from Kalta mine to Roxy Railway siding would require various statutory clearances including Forest Clearance and finalization of MDO. As of now, the route outside mining lease area upto Roxy Railway siding, along with the Feasibility Report has been finalized. The proposal is currently under

evaluation for approval by the SAIL Board. EAC noted the submissions of PP and directed that PP should complete the installation and commencement of conveyor belt as committed above for both Taldih and Kalta mines. EAC also advised PP to take necessary precautions while undertaking transportation through road upto the above mentioned railway sidings to prevent pilferage of mineral and air pollution.

The Site Inspection of Barsua, Taldih & Kalta Iron Mines was done by the Regional Office, MOEFCC, Bhubaneswar during 24th & 25th January, 2025 for reviewing & progress of jobs on the existing EC conditions. The Site Inspection / Monitoring Report have been issued on 05.03.2025 by RO Bhubaneswar. Subsequently, SAIL had submitted Action Taken Report (ATR) on 10.03.2025 against the observation given in site inspection/monitoring report. Based on the SAIL's ATR, MoEFCC Regional Office, Bhubaneswar has reviewed the compliances by doing another site inspection and issued comments (on ATR submitted by M/s SAIL) on 02.04.2025. Committee observed that as per the RO Bhubaneswar report dated 02.04.2025, PP has complied or assured to comply most of the conditions - as per the report majority of the conditions are being complied and/or assured to comply. EAC advised the PP to comply all the EC conditions within stipulated time as per the RO Report dated 02.04.2025 and PP's commitments. EAC specifically instructed PP to comply the conditions related to STP installation, installation of remaining fixed water sprinkling system, installation of remaining one CAAQMS and one manual AAQMS, within stipulated/ committed time period.

Based on the above discussions and presentation made by the Project Proponent and the Consultant, the EAC in its 43rd EAC meeting held during 22-23 April 2024 **recommended** the proposal of Amendment in Environmental Clearance dated 28.04.2023 for Barsua-Taldih-Kalta Iron Mines located in Koira Tehsil, Sundargarh District, Odisha under EIA notification 2006 (as amended) and permitted the transportation by road from Taldih mines to Barsua Railway siding for a period of two years upto 26.04.2027 and from Kalta Mines to Roxy Railway Siding for a period of 3years upto 26.04.2028 along with reduction in lease area from 2564.323 ha to 2558.581 ha in favour of M/s SAIL subject to the following additional specific conditions:-

- i. The specific condition (iv) of EC letter dated 28.04.2023 shall now be read as "The Project Proponent shall commence the operation of the conveyer belt from Taldih mine to Barusa Railway siding by 26.04.2027 and from Kalta mines to Roxy Railway siding by 26.04.2028. SPCB shall grant CTO upto 12 MTPA only (consisting of 4 MTPA from Barsua, 2MTPA from Taldih and 4MTPA from Kalta and 2MTPA sub-grade/tailings). After the operation of conveyer belt, SPCB may grant CTO upto 16 MTPA [(4MTPA from Barsua, 8 MTPA from Taldih and 4 MTPA from Kalta) and 2 MTPA sub-grade/tailings] based on site inspection of compliance of this conditions.

- ii. Tarpaulin covering should be done appropriately with no scope for ore spillage. The Project Proponent shall take adequate measures to prevent the pilferage of mineral during its transportation. Drivers, truck operators should be imparted training on the adverse effects of dust pollution, water pollution due to ore spillage on roads.
- iii. The Project Proponent needs to implement all possible mitigation measures while transporting the mineral by Road. Mechanically covered trucks should also be explored. Operators, supervisors, contractor personal should be properly trained on environmental aspects of ore/ waste spillage and resultant air and water pollution. Record of above training of the personal, supervisor/officials should be submitted to Regional office of MoEF&CC.
- iv. PP shall ensure that there will be no dust generation during transportation of Iron ore to Barsua and Roxy railway siding. Wind screens can also be provided to prevent adjacent population from adverse effects of mineral transportation.
- v. PP shall install the remaining four fog cannons in the ML area by October 2025.
- vi. PP has already installed 3 manual and 3 continuous ambient air quality monitoring station. PP shall install the remaining one continuous ambient air quality monitoring station till September 2025 and one Manual ambient air quality monitoring station by May 2025.
- vii. PP shall complete the installation of STP by December 2026.
- viii. PP shall complete the construction of remaining retaining wall/ gabion structure/garland drain by June 2025.
- ix. PP shall install the remaining permanent water sprinkling system by September 2025.
- x. PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign “ EK Ped Ma ke Naam” and the details of the same shall be uploaded in the Meri Life portal(<https://merilife.nic.in>).
- xi. All other terms and conditions of EC letter dated 28.04.2023 shall remain unchanged.

1.4 Enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at

Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana - For Environment Clearance reg.

[Online Proposal no. IA/TG/MIN/481840/2024, File No. J11015/152/2008-IA.II (M), EIA Consultant - J. M. Environet Pvt. Ltd.]

The instant proposal for Environmental Clearance for Enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	The instant proposal for Environmental Clearance for enhancement of limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.	
Location	Villages	Revoor & Mellacheruvu
	Tehsil/Taluka	Mellacheruvu
	District	Suryapet
	State / UT	Telangana
	Latitudes	16°49'23.7" N to 16°50'31.6" N
	Longitudes	79°57'39.0" E to 79°59'43.7" E
	Sol Topo sheet No.	E44T13 (56P/13) & E44T14 (56P/14)
Company's Name	M/s. Rain Cements Limited	
Accredited Consultant and certificate no.	J.M. EnviroNet Pvt. Ltd. Accredited EIA Consultant by NABET (QCI), Certificate No: NABET/EIA/2326/RA 0308, dated 29.11.2023 & valid up to 07.08.2026	
KML file	Submitted	
Seismic zone	Zone – II as per IS: 1893 (Part-I) : 2002	

ii. Category details:

Category of the project	Category "A".
Schedule No	Project or Activity 1(a) – 3
Mining lease Area (MLA) (in ha.)	417.95 Ha
General Conditions (if any)	NIL

iii. PP has obtained the Terms of Reference vide file no. J-11011/152/2008-IA. II (I) and vide online Proposal No. IA/TG/MIN/256638/2022 on 14.09.2022 for enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (ROM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the mine lease area of 417.95 ha at Revoor & Mellacheruvu villages, Mellacheruvu Mandal, Suryapet district, Telangana by M/s. Rain Cements Limited”.

iv. 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.	Grant of Mining Lease vide G.O Ms No 289 in favor of M/s. Laxmi Narayana Mining Company	08.05.1981	Limestone (Major)	29.09.1981 to 28.09.2001	Govt. of Andhra Pradesh	Acre 430.30 Guntas
2.	Transfer of Mining Lease vide G.O Ms No 402 from M/s. Laxmi Narayana Mining Company to M/s. Priyadarshini Cements Limited	15.09.1984	Limestone (Major)	For the unexpired portion of the lease i.e., upto 28.09.2001	Govt. of Andhra Pradesh	Acre 430.30 Guntas
3.	Grant of Mining Lease vide G.O Ms No 405 in favor	22.09.1988	Limestone (Major)	Valid upto 28.09.2001	Govt. of Andhra Pradesh	Acre 80.975 Guntas

	of M/s. Priyadarshini Cements Limited					
4.	Grant of Mining Lease vide G.O Ms No 307 in favor of M/s. Priyadarshini Cements Limited	06.06.1990	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 111.00 Guntas
5.	Grant of Mining Lease G.O Ms No 339 in favor of M/s. Priyadarshini Cements Limited for clubbing of the three mining leases (G.O Ms No. 402, 405 & 307)	01.10.1991	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 622.29 Guntas
6.	Grant of Mining Lease vide G.O Ms No 288 in favor of M/s. Priyadarshini Cements Limited	18.08.1998	Limestone (Major)	20 years (Valid upto 10.02.2019)	Govt. of Andhra Pradesh	Acre 127.07 Guntas
7.	Grant of Mining lease vide G.O Ms No 367 in favor of M/s. Priyadarshini	27.10.1998	Limestone (Major)	Valid upto 10.02.2019	Govt. of Andhra Pradesh	Acre 105.32 Guntas

	i Cements Limited					
8.	Grant of Mining Lease vide G.O Ms No 369 in favor of M/s. Priyadarshini Cements Limited	27.10.1998	Limestone (Major)	Valid upto 10.02.2019	Govt. of Andhra Pradesh	Acre 176.25 Guntas
9.	Grant of Mining Lease vide G.O Ms No 505 in favour of M/s. Priyadarshini Cements Limited for clubbing of the four-mining lease (G.O Ms No. 339, 369, 367 and 288)	19.09.2000	Limestone (Major)	Valid upto 27.09.2001	Govt. of Andhra Pradesh	Acre 1030.93 Guntas
10.	1 st renewal of Mining Lease vide G.O Ms No 192 in favour of M/s. Priyadarshini Cements Limited	04.05.2002	Limestone (Major)	20 years w.e.f 28.09.2001 to 27.09.2021	Govt. of Andhra Pradesh	Acre 1032.13 Guntas
11.	Transfer of Mining Lease vide G.O Ms No 238 from M/s. Priyadarshini	28.08.2006	Limestone (Major)	Valid upto 27.09.2021	Govt. of Andhra Pradesh	Acre 1032.13 Guntas

	i Cements Limited to M/s. Rain Industries Limited					
12.	Transfer of Mining Lease vide G.O Ms No 22 from M/s. Rain Industries Limited to M/s. Rain Cements Limited	13.11.2014	Limestone (Major)	Valid upto 27.09.2021	Govt. of Telangana	Acre 1032.13 Guntas (417.95 ha)
13.	Grant of Mining Lease vide G.O Ms No 72 in favour of M/s. Rain Cements Limited	24.08.2017	Limestone (Major)	50 Years (29.09.1981 to 28.09.2031)	Govt. of Telangana	Acre 1032.13 Guntas (417.95 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.	Mining lease executed vide proceeding No 1720/M/81 on 29.09.1981	29.09.1981	28.09.2001	Limestone	Acre 430.30 Guntas
2.	Mining lease executed vide proceeding No 2785/M1/1988 on 05.10.1988				Acre 80.975 Guntas
3.	Amalgamation the three leases (G.O Ms No. 402, 405 and 307) was executed vide proceeding No	01.10.1991	27.09.2001	Limestone	Acre 622.29 Guntas

	2394/M1/1991 on 11.03.1992				
4.	Mining lease executed vide proceeding No 433/M1/1986, dated 11.02.1999	18.08.1998	10.02.2019	Limestone	Acre 127.07 Guntas
5.	Mining lease executed vide proceeding No 11/M1/1985, dated 11.02.1999	27.10.1998	10.02.2019	Limestone	Acre 105.32 Guntas
6.	Mining lease executed vide proceeding No 1121/M1/1985, dated 11.02.1999	27.10.1998	10.02.2019	Limestone	Acre 176.25 Guntas
7.	Amalgamation the four leases (G.O Ms No. 339, 369, 367 and 288) was executed vide proceeding No 866/M2/2000, dated 11.01.2001	19.09.2000	27.09.2001	Limestone	Acre 1030.93 Guntas
8.	Mining lease deed execution of 1st Renewal vide proceeding no. 2720/M2/2002 dated 14.05.2002	28.09.2001	27.09.2021	Limestone	Acre 1032.13 Guntas
9.	Transfer deed in favour of M/s Rain Industries Limited was executed vide proceeding no. 2720/M2/2000 on 20.10.2006.	28.08.2006	27.09.2021	Limestone	Acre 1032.13 Guntas
10.	Transfer deed in favour of M/s Rain cement Limited was executed vide proceeding no. 667/M2/2008 on 07.02.2021	13.11.2014	27.09.2021	Limestone	Acre 1032.13 Guntas (417.95 ha)

11.	Supplementary lease deed executed in favour of M/s Rain cement Limited vide Proceeding No. 667/M2/2008 on 10.02.2018	27.08.2017	29.09.2031	Limestone	Acre 1032.13 Guntas (417.95 ha)
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v. Land Area Breakup

Private land	198.6156 ha
Government land	219.3344 ha
Forest Land	-
Total Mining lease area (MLA), Ha	417.95 ha
Private land for crusher, workshop & other infrastructure outside the MLA	-

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	letter no AP/NLG/MP/LST-22/Hyd
	Date	02.11.2023
	Validity	Valid upto 2026 - 2027
Mining Parameters	Quantitative Description	
Method of Mining	Mining operation is being/will be carried out by fully mechanized opencast method for excavation of limestone.	
Drilling/Blasting	<p>Drilling is to be carried out by deploying 150 mm dia. Drill equipped with in-built arrangement of water sprinkling for dust suppression and separate dust extraction system and this arrangement makes operations practically dust free. Blasting operations are proposed to be carried out in a controlled manner to minimize fly rock generation for safety of civil structures, machines and nearby habitation and agricultural fields under the supervision of Assistant Manager (Mines), well versed with technique to ensure quality and safety in the work. Due care is taken to keep the ground vibrations and air blast levels to the lowest possible limits to avoid any adverse impacts on the surrounding environment. Ultimate pit slope will be 55°.</p> <p>The drill parameter:</p> <ul style="list-style-type: none"> • Average Spacing = 5.5 m • Average Burden = 4 m • Average height of bench = 8 m 	

	<ul style="list-style-type: none"> Average bulk density = 2.5 Tonnes/m³ <p>Blasting</p> <p>Various types of explosives such as ANFO, slurry explosive etc. are being/ will be used for blasting. NONEL detonating fuse is being/ will be used since multi row system of firing is being/ will be carried to reduce the ground vibration, noise, fly rock etc. due to blasting.</p> <p>Blasting operations are proposed to be carried out in a controlled manner to minimize fly rock generation for safety of civil structures, machines and nearby habitation and agricultural fields.</p> <p>The details of blast parameters to be used in the mines are as under:</p> <ul style="list-style-type: none"> Drill holes diameter (mm) = 150 Burden (m) = 4 m Spacing (m) = 5.5m Charge per hole = 77.5 Kg Maximum holes blasted per delay = 36 Average power factor: 7.0 Firing sequence = Hole to Hole (using NONEL)
Geological Reserves	325.47 million Tonnes as on 01.10.2023
Mineable Reserves	196.14 million tonnes as on 01.10.2023
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	<ul style="list-style-type: none"> Limestone: 3.94 Million TPA Top Soil: 0.0075 Million TPA Total Excavation: 3.9475 million TPA
Life of mine	~52 Years (As on 01.10.2023)
Mine Bench Height & Bench Width	Bench height: 8 m Bench Width: 15 m
No. of Mine Benches	4 Numbers
plan period m bgl	47.32 m AMSL (34.84 m bgl)
Ultimate Depth of Mining, m bgl	47.32 m AMSL (34.84 m bgl)
Ground Water Table, m bgl	40 m bgl
Details of ground water intersection	Ultimate mine working depth will be 34.84 m and water table will be 40 m. Hence, water table will not be intersected due to mining
Individual bench slope	60° and Ultimate Slope of 55 °
Overall pit slope	45°
Details of existing/ proposed Crusher	There is no crusher in the mining lease area. Excavated limestone is being/ will be transported

	to crusher (located at Plant Site) through tippers (35 Tonnes).		
Mineral Beneficiation	None		
RoM output size	- 25 mm		
Transportation details including capacity of dumper/tipper, mode of transport and distance	Excavated limestone is being/ will be transported to crusher (located at Plant Site) through tippers (35 Tonnes).		
Generation of Topsoil/OB & its Management during plan period & conceptual period.	Nature of Waste	Generation	Management
	Top Soil	Plan Period: 6215 cum	Top soil generated will be utilized for plantation and green belt development
		Conceptual Stage: 6215 cum	
	OB Waste	No OB waste will be generated till conceptual period.	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-		

vii. Water requirement

Total water requirement	250 KLD	Fresh water	250 KLD
		Treated water	-
Source	Ground water and rain water collected in mine sump.		
Permission for withdrawal/ intersection along with details of grant and its validity	Water permission obtained from Telangana Ground Water Department on 24.08.2017		

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

Particulars	Villages	Directions
Nearest village	Village Revoor in SE (110 m from ML boundary & 450 m from UPL)	
	Village Kappalakunta Tanda in NW (Adjacent to ML & 750 m from UPL)	
	Village Medlache in West (Adjacent to ML & 550 m from UPL)	
Nearest Town / City	Kodad	(~15 km in North direction)
	NH-65	(~ 13.5 Km in NE direction)

Nearest State/National Highway	NH-167	(~12.0 Km in NW direction)
Nearest Railway Station	Ramapuram	(~2.0 Km in NE direction)
	Mellacheruvu	(~4.0 Km in SW direction)
Nearest water bodies	Name	Distance and Direction
	Seasonal Nala	In ML area Revoor Nala flowing West to East in Southern part. A seasonal drainage channel originating from the Northern Part of the area is flowing in between Pit No. 1 and Pit No.2 towards Southeast, and joins with Revoor Nala.
	Canal	~2.75 Km in WSW
	Mellacheruvu Lake	~3.5 Km in WSW
	Mukteshwaram Branch Canal	~ 4.0 km in North
	Ganapavram lake	~ 5.5 Km in NNW
	Palleru River	~ 5.85 Km in NE
	Antra Ganga vagu	~ 6.85 km in NNE
	Yerravaram cheruvu	~ 7.5 Km in NNW
	Gundla Vagu	~7.85 Km in SSE
	Krishna River	~8.0 Km in ESE
	Choutupally Lake	~ 8.5 Km in WSW
	Mathangamma Pedda cheruvu	~ 9.0 Km in NNE
	Redlakunta Branch Canal	~ 9.0 km in North
	Apart from these other small Nalas/nadis are also found in the 10 km radius of the lease area.	
Forest	Yepalmathvaaram RF	~4.0 Km in SW direction
	Buduvada RF	~4.5 Km in ENE direction
	Yepalmathvaaram RF	~4.85 Km in SW direction
	Balusupasdu RF	~6.5 Km in NE direction
	Chintalapalem RF	~ 7.0 Km in SSE direction
	Chintalapalem RF	~ 7.0 Km in SSW direction
	Nemalipuri RF	~7.87 km in SSE direction

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	No forestland involved in the Proposed block. Letter issued from State Forest Department on 12.01.2024 in this regard.
National Park	No	PP submitted letter dated 12.01.2024 from State Forest Deptt. Stating that No National Park, Wild Life Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/ Elephant Reserves, Reserve/ Protected Forest etc are located within 10 km radius study area.
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 9 Schedule- I fauna species i.e., Wild dog (<i>Cuon alpinus</i>), Indian fox (<i>Vulpes bengalensis</i>), Common India Krait (<i>Bungarus caeruleus</i>), Indian Chameleon (<i>Chameleon Zeylanicus</i>), Sand boa (<i>Eryx johnii</i>), Indian Monitor Lizard (<i>Varanus Benghalensis</i>), Indian cobra (<i>Naja naja</i>), Rat snake (<i>Ptyas mucosus</i>), viper (<i>Daboia russelii</i>), found in the buffer zone of the study area according to (IWPA) Indian Wild Life (Protection) Amendment Act, 2022.
Wildlife Conservation Plan	Yes	Wildlife Conservation plan over an amount of Rs. 59.25 Lakh for one year has been approved from Principle Chief Conservator of Forests (WL) & Chief Wildlife Warden vide letter No PCCF WL1/WL07/43/2023 dated 28.06.2024.

x. Green belt/ Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Total area to be covered under greenbelt/plantation will be 39.24 ha (1.82 ha on backfilled area, 12.75 ha along the periphery of mine lease area, 24.67 ha on the undisturbed area).
Budget for green plant & plantation till the end of life of mine.	Rs 1.25 Crore
Budget for nursery	None

Details of existing plantation and its survival rate	An area of 30.77 ha has been covered with 159022 no of trees
No. of tree cuts in the mine lease area and compensatory afforestation	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & Non mineralized areas	1.98 ha on 7.5 m safety zone
50 m safety zone of nallah, roads, electric lines	0.82 ha Plantation in safety zone of Road & Railway line
500 m safety zones of nearest habitation villages (Exhausted Pit Boundaries & Non-Mineralized areas)	36.47 ha plantation on un-worked area

xi. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	Post Monsoon Season (Oct to Dec., 2022)
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post - Monsoon
Predominant Wind direction (From)	North-West
Ambient Air Quality (no. of locations) and results	<p>Ambient Air Quality Monitoring at 14 Locations:</p> <p>PM₁₀ - 44.5 to 90.5 µg/m³, PM_{2.5} 25.2 to 52.5 µg/m³, SO₂ – 5.9 to 17.2 µg/m³, NO_x – 11.5 to 31.2 µg/m³</p> <p>Noise Level Monitoring at 11 locations</p> <p>During Day Time – 50.6 to 67.3 Leq dB (A), During Night Time – 41.3 to 52.4 Leq dB(A)</p> <p>Surface Water Sampling at 14 locations</p> <p>pH - 7.11 to 8.47, DO - 6.4 to 7.2 mg/l, BOD - 4.6 to 10 mg/l, COD - 20 to 40 mg/l</p> <p>Ground Water Sampling at 11 locations</p> <p>pH - 7.18 to 7.82, Total Hardness – 237.6 to 623.7 mg/l, Total dissolved solids- 430 to 1172 mg/l, Chlorides – 92.5 to 272.4 mg/l, Fluorides - 0.46 to 1.18 mg/l, Other Heavy metals- Iron- 0.04 to 0.32 mg/l</p> <p>Soil Sampling at 11 locations:</p>
Noise level (no. of locations) and results	
Water Quality (no. of locations) and results	
Soil Quality (no. of locations) and results	
Hydro geological study and results	
Traffic study (no. of locations) and results	

	pH – 6.81 to 8.06, potassium (624.8 to 1678.2 kg/ha), phosphorus (24.5 to 40.7 kg/ha), nitrogen (70.28 to 116.57 kg/ha) & organic matter (0.98 to 1.52 %)
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xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	“Indian Express newspaper” and “Mana Telangana newspaper” on 16.12.2023
Date of PH	20.01.2024 at 12:30 PM
Venue	Project Site
Chaired by	Chaired by: <ul style="list-style-type: none"> Shri. S Venkata Rao, District Magistrate of Suryapet Sri. P. Suresh Babu, Environmental Engineer, TGPCB, Suryapet
Main issues raised during PH	Infrastructure Development, Education Facility, Livelihood Enhancement & Environment Conservation and Health Facility.
Budget proposed for addressing issues raised during PH over 3 years	Rs 0.90 Crore

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	PP has obtained the CTE vide letter No APPCB/PTN/NLG/32/CFE/HO/2011-813, dated 18.06.2011
Consent to Operate	PP has obtained the CTO vide Consent Order No: 210523194658 dated 17.01.2022, which is valid up to 31.10.2026
Certified Compliance Report and Inspection date	PP has submitted the Certified Compliance Report for Existing Environmental Clearance issued from MoEFCC vide letter No ENV/IRO-HYD/MR-59/A/2021 dated 08.04.2025 (Site visit date: 25.03.2025)
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	PP has submitted year-wise production details of mine has been certified by State Mines Dept vide letter dated 12.07.2022

xiv. Rehabilitation & Resettlement:

R & R details	Total Mining Lease area is 417.95 ha which spreads over the part of villages Mellacheruvu and Revuru. Out of the total Mining lease area, 219.3344 ha Govt. Land and 198.6156 ha Private Agricultural Land. Out
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	of the patta land, company has purchased 77.131 ha and the rest 121.485 ha will be acquired by year 2028. This is running mine and expansion in limestone production is proposed within existing mining lease area.
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xv. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	PP has submitted an affidavit vide letter dated 17.04.2025

xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit vide letter dated 17.04.2025
Undertaking by Project Proponent in EIA/EMP report	PP has submitted an undertaking dated 17.06.2024
Undertaking by Consultant in EIA/EMP report	The Consultant has submitted an undertaking for preparation of EIA-EMP report in its letter head dated 17.06.2024
Plagiarism Certificate	PP has obtained the software generated Plagiarism certificate (Plagiarism Checker X-Report)) vide letter dated 04.03.2025.

xvii. The Project Proponent has submitted the point-wise reply vide letter dated 03.03.2025 against the EDS raised on 25.06.2024, as mentioned below

S.No	EDS Points	Reply by PP
1	PP needs to submit Complete TOR compliance not record.	PP has submitted the point wise compliance of Terms of reference granted by MoEFCC, New Delhi vide letter no. IA-J-11015/152/2008-IA.II(M) dated 14.09.2022 in favor of M/s. Rain Cements Ltd.

PP has submitted the point-wise reply on 08.04.2025 against the EDS raised on 20.03.2025, as mentioned below

S.No	EDS Points	Reply by PP
1	PP needs to submit NOC from Railway not found. Please expedite.	PP has obtained the NoC from Railway department vide letter dated 28.02.2025
2	PP needs to submit legible copies of the annexure mentioned in the EIA-EMP is uploaded in Parivesh Portal	Legible copies of the annexures mentioned in EIA-EMP report is uploaded in Parivesh Portal.
3	PP needs to submit the software generated Plagiarism certificate in EIA-EMP report	PP has obtained the software generated Plagiarism certificate

		(Plagiarism Checker X-Report)) vide letter dated 04.03.2025
4	PP needs to submit a legible copy of the certificate from State Forest Department regarding the presence of National Park/ Wildlife Sanctuary/Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area.	There is no National Park/ Wildlife Sanctuary/Biosphere Reserve/ Eco-Sensitive Zone within 10 km radius study area. Location map has been authenticated from DFO and same has been submitted from Forest Department in their letter No 1315/2022/53 dated 12.01.2024.

xviii. Details of the Environmental Management Plan (EMP)

Activities	Capital cost (Lakh)	Recurring cost (Lakhs/annum)
Environment Management Plan	Rs. 158.56 lakhs (Rs.92.48 Lakh existing + Rs. 66.08 Lakh proposed)	Rs. 46.91 Lakhs (Rs.19.6 lakh existing + Rs. 27.31 Lakh proposed)

xix. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Total Cost for EMP (Capital Cost of EMP + Capital cost of public hearing)	<ul style="list-style-type: none"> Cost for EMP: Rs. 1.58 Crore Cost for physical targets: Rs. 0.90 Crore Cost for Wildlife conservation: Rs 0.60 Crore Total: Rs. 3.08 Crore
Project Cost	Rs. 15.5 Crores
Employment	60 persons

3. Observation and Recommendation of the Committee:

The Expert Appraisal Committee (EAC) deliberated the instant proposal for Enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana.

The project is classified under Category "A" and falls under Activity 1(a)-3 of the schedule of the EIA Notification, 2006.

PP had obtained the Terms of Reference on 14.09.2022 for enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (ROM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the mine lease area of 417.95 ha.

The Project Proponent and the consultant presented the key site features using a KML file. The project site is located approximately 13.5 km northeast of National

Highway (NH) 65 and about 12.0 km northwest of NH-167. Nearby villages include Revoor to the southeast (approximately 110 meters from the mining lease boundary and 450 meters from the ultimate pit limit), Kappalakunta Tanda to the northwest (adjacent to the mining lease and 750 meters from the ultimate pit limit), and Shiva Balaji Tanda to the west (adjacent to the mining lease and about 550 meters from the ultimate pit limit).

The nearest railway stations are Ramapuram, located approximately 2.0 km to the northeast, and Mellacheruvu, located about 4.0 km to the southwest. Revoor Nala flows from west to east through the southern portion of the mining lease area. Water bodies including rivers, nalas, canals, and ponds, are present within the study area. Additionally, a seasonal drainage channel originates from the northern part of the area, flowing between Pit No. 1 and Pit No. 2 towards the southeast, where it merges with Revoor Nala.

The Project Proponent has stated that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger Reserves, Elephant Reserves, or Reserved/Protected Forests are located within a 10 km radius of the project site. However, same water bodies and Reserved Forest patches exist within the 10 km study area.

The mining lease, covering a total area of 417.95 hectares, is valid until 29.09.2031, with the supplementary lease deed executed on 10.02.2018. The lease area includes 198.6156 hectares of private land and 219.3344 hectares of government land. PP has submitted the certificate from the State Forest Department vide letter dated 12.01.2024 wherein it has been mentioned that the forest is not involved within mine lease area. Out of the patta land, company has purchased 77.131 ha and rest 121.485 ha will be acquired by year 2028.

The Modified Mining Plan, along with the Progressive Mine Closure Plan, was approved on 02.11.2023 and remains valid until 2026–2027. The ultimate mining depth is proposed at 47.32 meters above mean sea level (AMSL). The groundwater table in the area is located at a depth of approximately 40 meters below ground level (bgl), while the ultimate mine working depth will be 34.84 meters. The mining operations will not intersect the groundwater table.

PP further reported that the total fresh water requirement for the project is 250 KLD, which will be sourced from groundwater and rainwater collected in the mine sump. The PP has obtained the necessary permission for groundwater withdrawal from the Telangana Ground Water Department.

The PP has proposed the development of a greenbelt and plantation over a total area of 39.24 hectares, comprising 29.56 hectares of existing plantation and 9.68 hectares of new plantation. A total of 176,247 saplings are proposed to be planted, with an estimated budget of Rs. 125.49 lakhs.

The PP also submitted that baseline environmental data was collected during the post-monsoon season (October to December 2022), with the predominant wind direction observed from the north. Studies conducted included monitoring of ambient air quality, noise levels, water quality, soil quality, hydrogeological assessment, and traffic analysis. The results of these studies indicate that all monitored parameters are within the prescribed regulatory limits.

A village road runs along the eastern side of the lease area, with the ultimate pit limit located approximately 250 meters away. The ultimate pit limit is also situated about 110 meters from the nearby railway line. To assess the potential impact of blasting activities, a blast vibration study was conducted by the National Institute of Technology (NIT), Karnataka. The study was carried out using the proposed blast configurations, which involved a maximum of 39 blast holes per round, with a total explosive charge of 3,152 kg and a maximum charge per delay ranging from 81 to 101 kg. The study findings indicated that the intensity of ground vibrations decays significantly beyond a distance of approximately 250 meters from the blast site. Fly rock was observed to be restricted within a maximum distance of 35 meters. Noise levels recorded near the nearby villages were minimal. The study further concluded that the blasting operations carried out at Rain Cements Limited's limestone mine had no adverse impact on the houses and structures in Revuru village, Siva Balaji Tanda, Kappalakunta Tanda, or on the Jaggaiahpetta–Vishnupuram railway line. Based on the recommendations of the blasting study, a safety buffer zone of 100 meters has been demarcated as a no-mining zone on one side of the railway line, while the opposite side will be developed as a greenbelt.

PP has submitted NOC from South Central Railway Department vide letter dated 28.02.2025 wherein the said letter is has been stated that considering Railway line as sensitive structure, peak particle velocity of less than 5 mm/sec is to be ensured at Railway track as per the permissible standards mentioned at Para 7 DGMS (Tech) (S&T) circular no. 7 of 1997 dated 29.08.1997.

EAC noted the submission of PP and suggested that they needs to inform the local people, particularly the station master near the railway site and they have to prepare a protocol and communicate with the railway department, before conducting blasting at the project site.

The PP informed that the Public Hearing for the project was conducted on 20.01.2024. The hearing was chaired by the District Magistrate of Suryapet and attended by the Environmental Engineer, Telangana State Pollution Control Board (TGPCB), Suryapet. During the Public Hearing, key concerns raised by the local

community included demands for infrastructure development, improvement in education facilities, enhancement of livelihood opportunities, environmental conservation measures, and better healthcare services. To address these concerns, the Project Proponent has proposed a budget of Rs. 90 lakhs, to be spent over a period of three years. The proposed allocation includes Rs. 13.5 lakhs for strengthening education facilities, Rs. 52.5 lakhs for infrastructure development, and Rs. 24 lakhs for providing healthcare support.

The EAC took note of the submissions made by the Project Proponent and advised to take up the issues raised in public hearing and execute the action plan with respect to public hearing as per their commitment.

In this regard, the EAC advised that the Project Proponent should consult with the Directorate of General of Mines Safety (DGMS) regarding safety aspects. The Committee further suggested that the local farmers and residents should be informed well in advance about blasting schedules. It was emphasized that all necessary precautions must be strictly followed during the handling and use of explosives, and that every effort must be made to prevent accidents and minimize inconvenience to the surrounding communities.

The latest site visit for the expansion proposal was conducted by the Sub-Office of the Ministry located at Hyderabad on 25.03.2025. As per the certified compliance report submitted vide letter dated 08.04.2025, EAC noted that most of the conditions are complied or agreed to comply. EAC also observed the Sub-Office vide the CCR dated 08.04.2025 has directed PP to not plant *Conocarpus* species in the green belt since, it is an exotic species. EAC accordingly, asked PP to comply the recommendation of the report dated 08.04.2025.

Based on aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 43rd EAC meeting held on 22-23 April, 2025, under the provisions of the EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal for the grant of enhancement of Limestone production from 1.6 MTPA (ROM) to 3.94 MTPA (RoM) with total excavation of 3.9475 MTPA (ROM 3.94 MTPA + TS 0.0075 MTPA) in the Mine Lease area of 417.95 ha by M/s Rain Cements Limited located at Villages Revoor & Mellacheruvu, Mellacheruvu Mandal, District Suryapet, Telangana and is subject to the following specific conditions, in addition to the specific conditions applicable to Non-Coal mining projects: -

- i. PP shall comply with conditions of NoC issued from South Central Railway Department vide letter dated 28.02.2025. PP needs to prepare a protocol

during blasting operations and same has to be communicated with the railway department at the project site. PP needs to ensure that there is no blasting during movement of trains.

- ii. PP shall comply with the recommendations of the blast vibration study conducted by the National Institute of Technology (NIT), Karnataka.
- iii. No blasting activities shall take place within 500 meters from the residential areas located in the villages of Revoor, Kappalakunda Tanda and Shiva Balaji Tanad without prior permission from DGMS.
- iv. PP shall not plant Conocarpus species in the green belt, as given in the recommendations made in Certified Compliance Report dated 08.04.2025.
- v. The natural water bodies and or streams which are flowing in and around the mine lease area should not be disturbed. PP shall consult state Water Resource department and SPCB regarding safeguards for Nallah/Stream/naadi and follow their instructions. Implementation status of this condition should be communicated to Regional office, Bangalore.
- vi. PP shall carryout the blasting in a controlled manner such that the direction of the blasting should be perpendicular to the village/habitations. PP needs to strictly adhere to MMR (Metalliferous Mines Regulation) 1961 / DGMS guidelines for undertaking blasting activity so that safety is ensured and chances of ground vibration and overpressure are minimized. PP needs to monitor each blast by Seismograph and maintain blast wise record.
- vii. The Project Proponent shall continue to monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, at crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
- viii. The Project Proponent should install Continuous Ambient Air Quality Monitoring Stations (CAAQMS) as per the scientific study and in consultation with CPCB/SPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
- ix. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance reports.

- x. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
- xi. Tarpaulin covering should be done appropriately with no scope for ore spillage. The Project Proponent shall take adequate measures to prevent the pilferage of mineral during its transportation. Drivers, truck operators should be imparted training on the adverse effects of dust pollution, water pollution due to ore spillage on roads.
- xii. The Project Proponent needs to install the permanent water sprinklers in addition to mobile water tankers along the haul road and the approach road. Further, 06 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. One fog cannon at nearby school shall be installed along with metal wind screen. Fog cannons may also be placed near habitation side.
- xiii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years. PP needs to install solar power plant at the earliest to reduce dependency on conventional power supply from state.
- xiv. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. 3 sides of crusher should be covered with Noise barrier sheets. Permanent water sprinklers needs to be installed at 3 sides of crushers for dust suppression and near the unloading platform of limestone.
- xv. The Project Proponent should adopt the proper mitigation measures as proposed under EMP. 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.
- xvi. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should

comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.

- xvii. The Project Proponent shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to RO, MoEF&CC.
- xviii. The Project Proponent shall ensure the survival rate of 95% for planting the gap plantation and new plantation. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office. Density of plantation should be 2500 plants/ha). PP shall make provision for drip irrigation to conserve the water. PP should plant fruit bearing trees, along with other native and allied species within the ML area. Thick green belt between the mining zone and habitations shall be maintained so that there is adverse effects of dust and other mining operations. This green belt shall be developed at the earliest.
- xix. To address the concerns raised by the public in the public hearing, PP should complete its public hearing commitments within 3 years. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities. PP should ensure that points raised with respect to land acquisition in public hearing are properly addressed and a fair compensation of land is paid to PAPs/ PAFs. PP shall submit a report related to land acquisition to concerned Regional Office of MoEFCC, District Collector/ District Magistrate and also copy to IA (NCM) MoEFCC in every three months, for initial two years. MoEFCC may take appropriate decision in this regard based on the reports submitted by PP in this regard.
- xx. The Project Proponent needs to provide the good quality drinking water supply and also by laying network of pipelines to the local people of the nearby village Harima & Sarasani free of cost. PP needs to install water treatment plant and process the water before supplying to the villages.
- xxi. The Project Proponent shall provide the rainwater harvesting structure at mine offices and quarters/colonies in consultation with CGWA/SGWB to recharge the ground water.

- xxii. PP needs to construct sedimentation ponds, check dam, gabion structures, retaining wall, garland drain around the dumps (ore, waste, top soil) etc. to safeguard the natural Streams/Nallahs flowing in and around the Lease area.
- xxiii. 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. PP shall provide training related to sewing, laptop/ mobile repairing, masala(species) grinding/manufacturing etc. to the people of nearby villages so that alternate source of income is generated. PP should maintain a register of such training programs and submit a copy of concerned Regional Offices along with six monthly compliance report.
- xxiv. PP shall submit certified compliance report from Regional Office. MoEFCC with respect to compliance of EC conditions stipulated within two years of this EC.
- xxv. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people villagers and also the monitor the health impacts due to mining activity. A register of such medical camps for local people should be kept and a copy shall be submitted to concerned Regional Office of MoEFCC
- xxvi. The mobile water tankers should be used in the ML area for dust suppression and control. A logbook of water tankers should be maintained mentioning running hours, kilometre reading, and maintenance hours of water tankers for each shift. PP shall use non-toxic chemicals for dust suppression in order to reduce the total water requirement. Copy of log book should be submitted to Regional Office of MoEFCC.
- xxvii. The Project Proponent should take adequate measures to prevent the fly rock falling onto the nearby habitations and also the Project Proponent needs to set up a permanent monitoring in the nearby village to monitor the blast induced ground vibration and air over pressure.
- xxviii. The Project Proponent needs to reduce the dependency upon the ground water, surface water (water from rivers, etc.) and it shall construct water reservoirs (at least three) within the lease area for meeting its day-

to-day water needs. An implementation report in this regard needs to be submitted to Ministry's Regional Office.

- xxix. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
- xxx. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- xxxi. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- xxxii. PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign "EK Ped Ma ke Naam" (एकपेड़मौकेनाम) and the details of the same shall be uploaded in the Meri Life portal(<https://merilife.nic.in>).
- xxxiii. PP shall ensure that all type of plastic waste generated from the mines shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016. In pursuant to Ministry's OM dated 18/07/2022 PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report being submitted by PP.

1.5 Rohida Limestone Mine with production capacity of Limestone 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, Total excavation 8.91MTPA along with 1000 TPH of Crusher in mine lease area of 800.9935ha by M/s Kamlesh Meta Cast Private Limited, located at villages Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan - For Terms of Reference reg.

[Online Proposal no. IA/RJ/MIN/509472/2024, File No. IA-J 11015/81/2024-IA-II (NCM), EIA Consultant - Enkay Enviro Services Pvt. Ltd.]

The instant proposal is for Reconsideration of Terms of Reference Rohida Limestone Mine with production capacity of Limestone 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, Total excavation 8.91MTPA along with 1000 TPH of Crusher in mine lease area of 800.9935ha by M/s Kamlesh Meta Cast Private Limited, located at villages Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	The instant proposal is for Reconsideration of Terms of Reference Rohida Limestone Mine with production capacity of Limestone 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, Total excavation 8.91MTPA along with 1000 TPH of Crusher in mine lease area of 800.9935ha by M/s Kamlesh Meta Cast Private Limited, located at villages Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan	
Location	Village (s)	Rohida (Rohera as per toposheet), Bharja, Taroongi (Tarangi as per toposheet), Doliphali, Vatera (Watera as per toposheet), Pipla (Pipela as per toposheet), Kharadoli
	Tehsil	Pindwara
	District	Sirohi
	State	Rajasthan
	Latitudes	24° 32' 47.3874"N to 24° 38' 33.7254"N
	Longitudes	72° 51' 57.958"E to 72° 57' 57.515"E
	Sol Topo sheet No.	45D/14, 15 & 45 H/2
Company's Name	Kamlesh Metacast Private Limited	
Accredited Consultant and certificate no.	Enkay Enviro Services Private Limited NABET/EIA/23-26/RA 0326 validity till 14.12.2026	
KML file	Uploaded	
Seismic zone	Seismic Zone III, as per the seismic zoning map of India given in BIS code IS: 1893 (Part1)-2002.	

ii. Category details:

Category of the project	A
Schedule No.	1(a) Mining of minerals
Mining lease Area (MLA) (in ha.)	800.9935
General Conditions (if any)	None

iii. Details of Mine Lease in chronological manner:

Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	<p>Prospecting License:</p> <p>Prospecting License (PL) for limestone over an area of 1859.0275 ha near Village Rohida (Rohera as per toposheet) in Tehsil Pindwara, District Sirohi, Rajasthan granted vide Government Order no. Nikhabhu/ Sirohi/ CC.2/ P1 (2) 7/11/ 5255 dated 24-12-2014. PL executed on 12-03-2015.</p> <p>Letter of Intent (LoI):</p> <p>The LOI for an area of 800.9935 ha has been granted by Mines and Petroleum Department, Government of Rajasthan. LoI has been issued vide order no. P 3 (6) Khan/Group-2/2022 dated 13.03.2023. As per the condition of LoI, Mining plan has to be approved within 6 months and Environmental Clearance has to be obtained within 2 years.</p> <p>Upon request of KMPL and approval from GOR, approval timeline has been extended upto 12.03.2026 for EC and 12.09.2025 for mining plan vide order no. P.3 (6) Khan/Grp-2/2022 dated 25.07.2023 and P.3 (6) Khan/Grp-2/2022 dated 23.08.2024.</p>
Date of the grant	13.03.2023
Name of the Mineral & (Major/Minor)	Limestone (Major)
Period of Grant	Upto 12.09.2025 for mining plan and 12.03.2026 for EC
Granted by	Mines and Petroleum Department, Government of Rajasthan
Mine lease area in Ha	800.9935

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

Private land	551.9535 ha
Government land	227.9500 ha
Forest Land	Nil
Grazing /Charagah Land	21.0900 ha
Total Mining lease area (MLA)	800.9935 ha.
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

v. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	Letter no. E12030-MCDR-MPC0LST/28/2024-AJM-IBM_RO_AJM
	Date	27.11.2024
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	800.9935
	Validity	50 years validity from the date of lease registration and execution.
Mining Parameters	Quantitative Description	
Method of Mining	Open cast mechanized mining	
Drilling/Blasting	Wet drilling with sharp drill bits (Hydraulic, Hole Dia 150mm, hole depth 11 mtr hole) Controlled blasting by optimal charging of blast holes and use of delay detonator (NONEL) using ANFO as explosive. Use of hydraulic rock breaker to avoid secondary blasting.	
Geological Reserves	27,67,13,725.85 MT (276.71 Million Tonnes)	
Mineable Reserves	5,67,92,655.30 MT (56.79 Million Tonnes)	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Limestone (Mineral) – 2.85 Million TPA, Mineral Reject- 0.24, Soil – 0.04 Million TPA & OB – 5.78 Million TPA	
Life of mine	20 years	
Mine Bench Height & Bench Width	10 m & 15-20m	
No. of Mine Benches	12	
Existing Depth, m bgl	0	
Ultimate Depth of Mining, m bgl	76	
Ground Water Table, m bgl	60m bgl in Pre-monsoon and 55m bgl in Post monsoon	
Details of ground water intersection	Mining will be carried out upto 250 MSL during the mining period. After 15 years for which CGWA NOC will be obtained for dewatering.	
Individual bench slope	80°	
Overall pit slope	≤45°	
Details of existing/ proposed Crusher	Proposed: Crusher (1000 TPH) with wobbler and screening (200 TPH)	
Mineral Beneficiation	Nil	
RoM output size	1000 mm	

Transportation details including capacity of dumper/tipper, mode of transport and distance	The Mineral will be transported to crusher located within applied ML area by Dumper/Trucks capacity 55 tonne
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>Plan Period: Top soil: 0.056 Million Tonne OB: 11.8452 Million Tonne</p> <p>Conceptual Period: Top Soil: 0.16 Million Tonne OB: 65.97 Million Tonne Top soil will be used for simultaneously for greenbelt/plantation development Ob will be used for backfilling of pit no-2 and rest will be stacked at earmarked dump site.</p>
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	<p>Plan Period: Mineral Reject: 0.7450 Million Tonne</p> <p>Conceptual Period: Mineral Reject: 4.94 Million Tonne Mineral reject will be stacked at earmarked dump site.</p>

vi. Water requirement

Total water requirement	<p>Fresh water: 150 KLD</p> <p>10 KLD will be required for drinking and sanitation, 20 KLD Greenbelt development, 10 KLD mine workshop and 110 KLD for dust suppression</p>
	<p>Treated Water: 8 KLD</p> <p>HEMM washing water will be passed through Oil and grease separator. Treated water will be used for dust suppression at crusher.</p>
Source	Ground water
Permission for withdrawal/ intersection along with details of grant and its validity	Permission will be taken as per Rules & Regulation

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

Particulars	Particular's Name	Distance &Directions
Village	Taroongi (Tarangi as per Toposheet) & Bharja	Some village parts falls within the lease area

Town	Abu Road	9.82 Km. SW
Highway	NH-927A	Passing through the lease area
	NH-27	1.70 Km. NW
Interstate Boundary	None	None
Railway Station/Railway line	Kivrali Railway Station	2.56 km in WSW
Water bodies	Hukli Nadi	8.89 km in NNE
	Silva Nala	5.54 km in E
	Kosiya Bhagra Nala	7.72 km in E
	Akhleti Nala	5.85 km in E
	Mandwara Distributary	3.36 km in E
	Khara Distributary	1.27 km in ESE
	Chitriya Nala	4.99 km in SE
	Sukli Nadi	Passing through the lease area
	Batriya Nadi	3.55 km in S
	Left Canal	1.52 km in E
	Banas River	2.37 km in WNW
	Gabir Nala	2.90 km in NW
	Right Canal	5.29 km in NW
	Grangri Bala	4.47 km in NNW
	Sangwara Minor	5.25 km in NW
	Sangbariya Balo	5.51 km in NW
	Sukli Nadi	5.24 km in NW
Forest	Nitaura Jor Reserved Forest	8.0 km in NW
	Reserved Forest N/V Swarupganj	2.97 in NW
	Reserved Forest N/V Pipela	2.08 in NW
	Protected Forest N/V Hirawala	0.56 in NE
	Reserved Forest N/V Wara	0.064 in S
	Reserved Forest N/V Wara	0.96 in SW
	Kivrali Ka Zor Reserved Forest	1.10 in W
	Mount Abu Wild Life Sanctuary	5.47 in NW
	Reserved Forest N/V Pipela	1.10 in NW

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
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Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	PP has submitted non forest land certificate vide letter dated 02.02.2025 from the Office of Regional Forest Officer Pindwara, Sirohi
National Park	No	The NOC has been obtained from the DCF Sirohi vide letter no. F () Survey /DCF/2025/454, date 20.01.2025.
Wildlife Sanctuary	Mount Abu Wildlife Sanctuary (5.5 Km. NW)	
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)		PP has stated that the information will be submitted in EIA-EMP report.
Wildlife Conservation Plan		PP has stated that the information will be submitted in EIA/EMP Report.

ix. Green belt/ Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	128.30 ha, 1,39,100 saplings
Budget for green plant & plantation till the end of life of mine.	792.82 lakhs
Budget for nursery	15 lakhs
Details of existing plantation and its survival rate	None
No. of tree cuts in the mine lease area and compensatory afforestation	250 and 1:10 as compensatory afforestation=2500
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	30.70

x. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	01/03/2023 to 31/05/2023
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Pre-monsoon

Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	8
Soil Quality (no. of locations) and results	8

xi. Rehabilitation & Resettlement (R&R): This Proposal is for ToR

R & R details	R&R study will be covered during EIA study.
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xii. Court case details:

Court Case, No and its present status	PP has stated that no litigation is pending.
Undertaking by Project Proponent w.r.t court case	PP has submitted an undertaking for no court cases vide letter dated 29.11.2024.

xiii. Affidavit/Undertaking details: This Proposal is for ToR

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted an affidavit on 29.11.2024 as per the Ministry's OM dated 30.05.2018
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xiv. PP has submitted the following point-wise reply to the ADS raised during 38th EAC Meeting held on 27th December 2024 and also further raised the additional details were sought on 09.01.2025 respectively. PP has submitted the reply on 06.02.2025 as given below:

S. No	ADS Point	Reply by Project Proponent
1.	The Project proponent needs to obtain necessary permission/NOC from State Water Resource Department to undertake mining activity on the banks of Sukli River passing through ML area.	<p>The NOC is obtained from the Department of Water Resource, Sirohi vide letter no. 2024-25/5071 dated 03.01.2025.</p> <p>The NOC is granted for mining (nearest pit no. 12 & 13) at a distance of 50 Mts from River Bank subjected to construction of retaining wall {rubble wall 3x2x2(m)} along the pit boundary towards the river to protect from any waste/siltation blocking the natural drainage channel. As per the NOC the mining area (pit no. 12 & 13) are not the part of River.</p>
2.	PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same for examination by EAC. PP should provide an undertaking that no Mining	The Department of Water Resources Swaroopganj, has issued a letter dated 13.01.2025 stating that the UPL of pit no. 12 & 13 which are proposed at minimum distance of 50

	will be conducted within the HFL (Highest Flood Level) of the Sukli River.	<p>Mts. from the River HFL and is not be affected by HFL in past 30 years.</p> <p>River HFL level is given as below:</p> <ol style="list-style-type: none"> 1. Pit no 12: river HFL is recorded as 318 MSL, while the pit UPL is 320 MSL. 2. Pit no 13: river HFL 318.5 MSL and Pit UPL 330 MSL.
3.	Households, Schools and primary health care centers lying near to the proposed pit area shall be shifted within 2 years. No mining activity shall be permitted within 500 m of school and habitation. Accordingly, the Project Proponent needs to submit an action plan to expedite the shifting of habitation/school/health centre present within the ML area and also to safeguard them from adverse effect of mining operations	<p>In this regard the letter received from the Office of DGMS, vide letter no. AJM/Directorate-1/2025/169 dated-20.01.2025 where danger zone is considered as 300 Mts. as per the Rule 164 (1-A) (b) of MMR 1961 and no blasting will be conducted within 300 mts. danger zone from any permanent surface structure without obtaining the DGMS permission.</p> <p>The letter also clarifies that, in case of school and habitation exist within danger zone of 300 mts., a prior scientific study is required to be submitted and approved from DGMS with maximum charge per delay and other blasting parameters. As per the letter, Permission under Regulation 164(1-B) (a) of MMDR 1961, controlled deep hole blasting is granted up to 100 mts. distance from any school and habitation.</p> <p>However, in our case, during the 1st year working there is no mining activity undertaken and only haul road will be developed from pit no. 1 to crusher. (2.20 Km)</p> <p>During the 2nd year, mining will be initiated in pit no. 1 which will be located at distance of 470m away from the village Tarangi (Taroongi).</p>

		<p>Based on the 2nd year mining a scientific study will be carried out from the reputed credible institute for working within 300 Mts. and prior DGMS approval will be obtained for safe mining maintaining minimum distance from the sensitive locations.</p> <p>Working within the 300 Mts. blasting with NONEL technology (shock tube delay detonator), maximum charge per delay and other blasting parameters will be followed as per the approval.</p> <p>If there is any R&R the same will be mentioned in EIA/EMP Report</p>
4.	PP needs to revise the distance of its UPL from the proposed pits as per MMR (Metalliferous Mining Regulations) /DGMS guidelines to ensure safety of Habitation/School and Primary Health Care Centers.	<p>As per DGMS letter dated 20.01.2025 the danger zone is considered unto 300 mts. and accordingly no deep hole blasting will be conducted within Danger Zone from any permanent surface structure without obtaining the DGMS permission.</p> <p>As per the letter mining up to 50 Mts. distance from any sensitive location prior approval will be taken.</p> <p>Based on the 2nd year mining a scientific study will be carried out from the reputed institute for working within 300 Mts. and prior DGMS approval will be obtained for safe mining maintaining minimum distance from the sensitive locations to ensure safety of Habitation/School and Primary Health Care Centres.</p>
5.	No river water shall be used in mining operations. PP shall submit an action plan to source water from nearby STPs	Total fresh water requirement will be 150 KLD out of which 10 KLD will be required for drinking and domestic

	as stated during the meeting instead of sourcing it from groundwater.	and 140 KLD will be required for mining activities. Pursuant to the application made for willingness of treated w/w from STP at Santpur by RUID, a denial letter date-21.01.2025 has been received. Thus, we depending upon the ground water. For this application will be made to abstract ground water to the tune of 150 KLD on NOCAP of CGWA. The block is categorized as Semi-Critical and the permission of the same will be obtained. It is also mentioned that later as the pits develop, the ground water abstraction will be restricted only for drinking purpose only.
6.	PP needs to submit the proposed transportation route for transportation of mined out limestone till the cement plant is constructed.	We are in discussion with the Government of Rajasthan for finalization of location of the proposed cement plant. Land acquisition for cement plant will start after getting the final approval from Government. After getting the EC for mining project, the total mining production in 1st two years will be 8383 tonne only which will be stacked near the crusher. From 3rd year onwards full mining production of 2.85 million TPA will be achieved which will be transported to the proposed cement plant site initially by road and later feasibility for installation of OLBC will be explored after the plant site finalization.
7.	PP needs to submit the embankment design approved by State Government /Local Administration.	The design of proposed embankment/parapet wall along the pit no. 12 & 13 has been approved by the Water Resources Department Sirohi.

8.	PP needs to submit a NoC from DFO regarding mining operations near ESZ and wildlife sanctuary.	The nearest distance from the ML boundary and Mount Abu Wildlife sanctuary is 5.5 km & the lease area is outside of the Mount Abu ESZ. The NOC has been obtained from the DCF Sirohi vide letter no. F () Survey /DCF/2025/454, DATE-20.01.2025.
9.	PP needs to generate electricity by installing solar Power Plant and submit action plan to reduce diesel consumption by 30 %.	A 10 KW solar panel will be installed at the roof of mine office to meet the power requirement for office and common areas. Power consumed by the crusher will be sourced from Grid where the green power consumption will be ensured under the PPA mode to align with India's Net Zero Commitment. The fuel conservation measures will be: Use of fuel-efficient equipment's Use of low sulphur content diesel or green fuel as available. The action plan for reduction of 30% diesel will be elaborated in the final EIA/EMP.

- xv. PP has submitted the following point-wise reply to the ADS was raised during 41st EAC Meeting held on 27th February 2025 and also further raised the additional details were sought on 27.02.2025 respectively. PP has submitted the reply vide letter dated 15.04.2025 as mentioned below:

S. No	ADS Point	Reply by Project Proponent
1	In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should consult state DMG regarding location of mine lease inside/outside Aravalli Hills and range.	Acting on the query raised under this point, we have sought a letter from Office of DMG, wherein it is stated that The Hon'ble Court Order dated 09.05.2024 mentions that all Statutory approvals from Various Authorities can be obtained and the order does not cease any approvals for the same. The proposed project doesn't fall in the Aravalli Hills and also does not contempt

		<p>the order dated 08.04.2005 of Hon'ble Supreme Court.</p> <p>The letter is issued in this regard from the Office of DMG Udaipur: vide letter no. 766 dated 26.03.2025.</p>
2.	PP should obtain a letter/certificate from DCF Sirohi about forest land involved in the project, if any.	There is no forest land involved in proposed project has been endorsed in the letter issued from the office of regional forest office, Pindwara vide letter no. F(/ Surve/ 2024-2025/105 dated 02.02.2025.
3.	PP needs to obtain the HFL data from State Water Resource Department for past 30 years and submit the same for examination by EAC.	A letter pursuant to the EAC MOM posted, was requested from The Department of Water Resources, Sirohi. The letter no 58 dated 04/04/2025 states that <i>"The Sukli River is not a perennial river and there are no gauge plates and measuring device affixed to measure the flow/flood level. So, they don't have record Flow/ Flood Level data for the Sukli River. The HFL level was calculated based on the maximum rainfall recorded in the catchment area over the past 30 years and with inputs from local senior person"</i> Based on this they have already provided the HFL level 318 m in the letter no 588 issued from, the office of Assistant Engineer water resource sub division, Sarupganj dated 13.01.2025.
4.	PP needs to provide the official name of the Sukri/ Sukli river as per Government record.	The above referred letter at point no. 3 clarifies the name as "Sukli River"
5.	PP needs to come out with an action plan to commission OLBC along with route survey plan.	<p>Action Plan to commission OLBC:</p> <p>We have signed a MOU with Govt of Rajasthan in the Investors Summit for allotment of land for setting up a cement plant.</p> <p>We have already requested the District Collector, Sirohi for allotment of land (copy submitted) and recently we have received the reply from Office of District Collector, ADM Sirohi, vide letter no 1519-20 dated 10.04.2025. The proposal is under process (copy submitted)</p>

		We also submitted the google earth photo for proposed land and OLBC route plan from Crusher to cement plant for Length – 5.76 km and Width – 1.2 meter.
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xvi. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Air pollution control and management(dry fog system at crusher, crusher enclosures, bag dust collector at crusher, water sprinkler on haul roads)	0.87	0.10
Water and wastewater control and management (Garland drains, de-silting pits, septic tank & soak pits, oil and grease separation pits for HEEMS workshop, roof top rainwater harvesting and water meter)	0.50	0.05
Health and safety management (use of PPE's and primary health care & fencing)	0.10	0.010
Environmental monitoring (CAAQMS, Peizometer)	0.60	0.06
Plantation & Green Belt	7.93	0.25
Total	10.0	0.47

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	Total Cost of EMP will be given after PH. Capital Cost of EMP- 10 Cr.
Project Cost	203.526
Employment (No.s)	80

3. Observation and Recommendation of the Committee:

The EAC deliberated the instant proposal for Reconsideration of Terms of Reference for Rohida Limestone Mine for mining of limestone with production capacity of 2.85MTPA, Mineral Reject 0.24 MTPA, Soil 0.04 MTPA & OB 5.78MTPA, total excavation 8.91MTPA along with the installation of 1000 TPH Crusher by M/s Kamlesh Meta Cast Private Limited in mine lease area of 800.9935ha located in village(S) Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil Pindwara, District Sirohi, Rajasthan.

The Project Proponent and the consultant presented the KML file and explained the key site features of the Mine lease and the study area. PP stated that Mount Abu Wildlife Sanctuary is located at a distance of 5.47 km in NW direction from the ML area

and its ESZ is located at a distance of 4.47 km. PP mentioned that some part of village Tarangi and Bharja is lying within the ML area and village Wadera is located at a distance of 50 m in the eastern direction. PP also added that Bharja to Wadera road passes through the ML area, NH-927A (Swaroopganj- Ratlam) road is also passing through ML area and NH-27 is located at a distance of 2.56 km in WSW direction. PP also stated that Sukli River is passing through ML and it merges with Banas River. EAC also noted the presence of habitations, schools and primary health centre within the ML area and asked PP about the proposed safeguards. PP stated that they will shift the habitation where necessary and will adhere to safety norms before starting the mining activity. EAC noted the proposed safety distance submitted by PP are not as per DGMS guidelines. It accordingly, advised PP to revise the safety distances as per the rules/guidelines of DGMS.

Thereafter, the Project Proponent presented the reply to the ADS raised vide minutes of the 41st EAC meeting held during 21.02.2025.

With regard to the involvement of any forest land within mine lease area, PP presented a letter dated 02.02.2025 issued by the Office of Regional Forest Officer Pindwara, Sirohi wherein it was mentioned that forest land is not present within the mine lease area.

Regarding HFL data for past 30 years and official name of the river, PP submitted a letter dated 04.04.2025 from the Office of Executive Engineer, Water Resource Department Sirohi, wherein it was stated that the name of the said river as per the record is 'SUKLI' and there are no gauge plates and measuring device affixed to measure the Flow/ Flood Level. Accordingly, no data is recorded. It has been further mentioned in the letter that the HFL level was calculated based on the maximum rainfall recorded in the catchment area over the past 30 years and with inputs from local senior person and same has been communicated earlier by the Assistant Engineer, Water Resource Sub Division, Swarupganj Office letter no 588 dated 13/01/2025.

EAC noted the submission of PP and reiterated that in absence of data, the benchmark of 318m HFL as provided vide letter dated 13.01.2025 and 04.04.2025 may be taken in account while proposing the mining activity at proposed pit no. 12 & 13. PP informed the committee that Department of Water Resources Swarupganj, has issued a letter dated 13.01.2025 stating that the UPL of pit no. 12 & 13 are proposed at minimum distance of 50 Mts. from the River HFL and is not be affected by HFL in past 30 years. PP also added that the at pit no. 12, river HFL is recorded s 318 MSL whereas pit UPL will be 320 MSL, similarly, river HFL near pit 13 is 318.5 MSL and pit UPL is 330 MSL. PP also submitted a drawing (not in scale) showing Sukli riverbed and its HFL signed by Assistant Engineer.

EAC noted the submission of PP and highlighted that CPCB had earlier issued a distance criteria for permitting stone quarrying in reference to Hon'ble NGT order dated 28.02.2020 in the OA NO. 304/2019 which was later mandated by Hon'ble NGT vide order dated 21.07.2020.

EAC suggested PP to come out with alternate techniques for mining/excavation at proposed pit no. 12 & 13 areas close to River. EAC also suggested to explore the options of surface miners based upon the compressive strength and hardness of the ore.

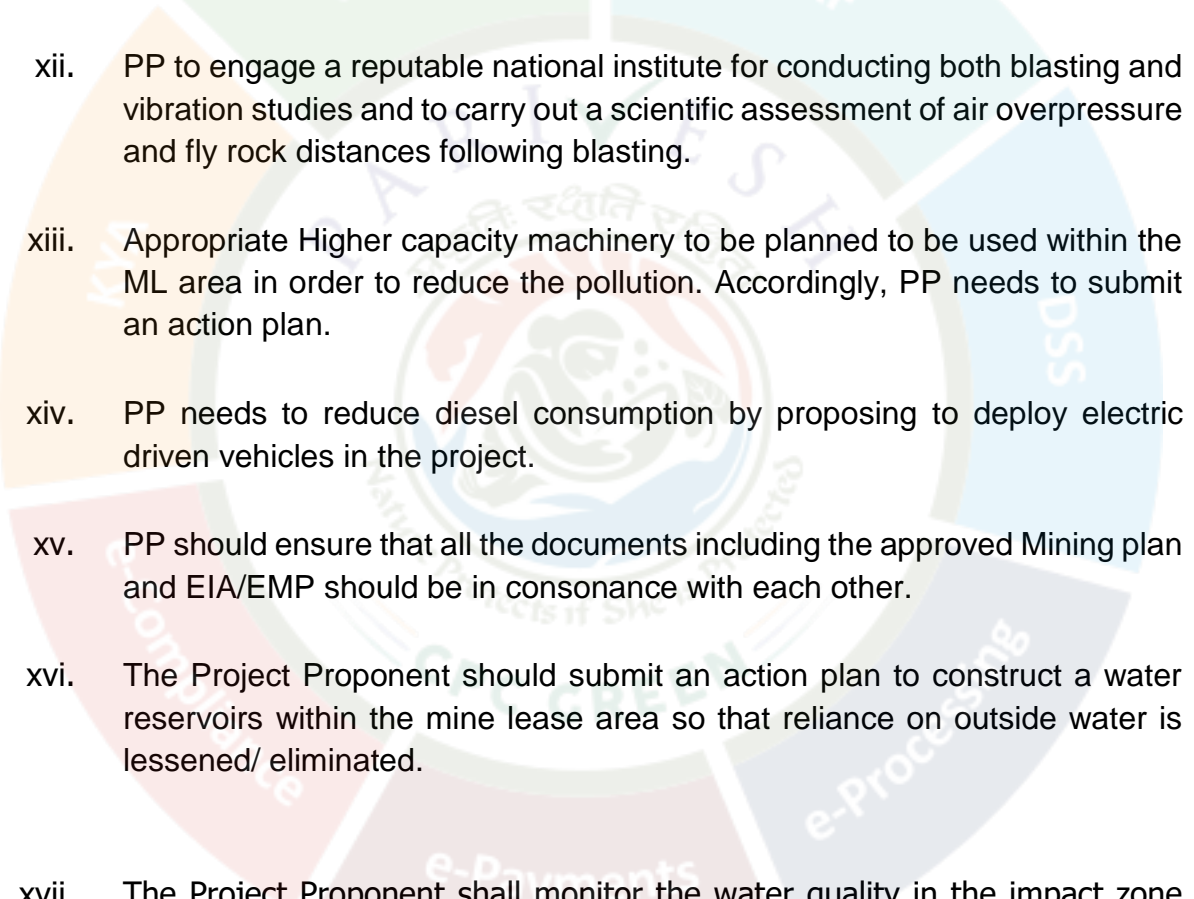
Regarding action plan for installation of OLBC, PP submitted that they have identified a land for proposed cement plant and already have requested the State Government for its allotment vide letter dated 10.04.2025. PP also submitted the proposed route for OLBC installation. EAC noted the submission of PP and advised to submit the detailed OLBC installation plan at the time of EC application.

With regard to the Hon'ble Supreme Court's order dated 09.05.2024 and location of proposed ML area, PP submitted a letter dated 26.03.2025 from Office of Director-DMG, Udaipur stating that the aforesaid order mentions that all statutory approvals from various authorities can be obtained and the order does not cease any approval for the same. It is also mentioned that the ML area doesn't fall in the Aravalli Hills. EAC noted the submission of PP and asked to submit an undertaking in the form of an affidavit to comply with the directions of Hon'ble courts. Accordingly, PP vide email dated 24.04.2025 submitted an affidavit dated 22.04.2025 wherein PP has stated that they will abide by the final outcome of the Hon'ble Supreme Court in the matter of ongoing WP number 4677/1985 in relation to Aravalli Hills. PP has also submitted that they will abide by the outcome of the Hon'ble NGT order in the matter of ongoing OA No. 304/2019 with respect to revising the distance criteria by CPCB from lease to various sensitive areas. In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should regularly consult state DMG regarding location of mine lease inside/outside Aravalli Hills/range.

Based on aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 43rd EAC meeting held on 22-23 April, 2025, under the provisions of the EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal for the grant of Terms of Reference (ToR) for Rohida Limestone Mine of Kamlesh Meta Cast Private Limited with production capacity of 8.91 Million TPA Total Excavation (Limestone (Mineral) – 2.85 Million TPA, Mineral Reject- 0.24, Soil – 0.04 Million TPA & OB – 5.78 Million TPA) with proposed 1000 TPH of crusher over an area of 800.9935 ha located in Village(S) - Rohida, Bharja, Taroongi, Doliphali, Vatera, Pipla, Kharadoli, Tehsil – Pindwara,

District – Sirohi, Rajasthan. The recommendation is for undertaking a detailed EIA/EMP study and is subject to the following specific conditions, in addition to the standard ToR conditions applicable to Non-Coal mining projects: -

- i. PP needs to submit the location of the proposed cement plan, route of transportation and timeline for completion of OLBC.
- ii. PP needs to comply with the Hon'ble NGT's order dated 21.07.2020 in the OA No. 304/2019 and the recommendation of the CPCB report regarding distance criteria.
- iii. PP shall comply with all the Judgement/ Orders of Hon'ble NGT in the OA No. 304/2019 in the matter of M.Haridasan & Ors. Applicant (s) versus State of Kerala & Ors. Reg.
- iv. PP shall comply with all the Orders/ Judgement of Hon'ble Supreme Court, Hon'ble Court, Hon'ble NGT or any court of Law in the matter of Aravalli Hills/ Range.
- v. PP needs to engage any national institute of repute to explore the comprehensive strength of the limestone ore and feasibility of deploying surface miners.
- vi. PP needs to submit the complete design and timeline for completion of the embankment near Pit no. 12 and 13. Consultation with DGMS should be done with respect to safety aspects of embankment.
- vii. PP shall plan so that that the UPL of the proposed pit nos 12 & 13 shall always remain above the HFL of Sukli River to ensure zero ingress of river water. Consultation with DGMS should be done in this regard.
- viii. PP needs to submit the data regarding the loss of water flow in Sukli River due to change in catchment area owing to the proposed mining activity. PP also needs to provide an action plan to compensate for the water loss to the farmers that are dependent on the water of Sukli River for irrigation.
- ix. PP needs to submit the water quality data for the upstream and downstream of the river. PP shall ensure that there are no adverse effects on Sukli River due to the proposed mining activity. Scientific study should be conducted to know the possible adverse impacts on Sukli River from Mining operations, blasting etc.

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- x. The natural water bodies and or streams which are flowing in and around the mine lease area should not be disturbed. PP shall consult state Water Resource department and SPCB regarding safeguards for River/Nallah and submit an action plan for protection of the same.
- xi. Households, Primary Health Care Centres (PHC) & Schools lying near to the proposed pit area shall be planned to shifted within 2 years. No mining activity shall be permitted within 500 m of schools and habitations. Accordingly, the Project Proponent needs to submit an action plan to expedite the shifting of habitation present within the ML area and also to safeguard them from adverse effect of mining operations.
- xii. PP to engage a reputable national institute for conducting both blasting and vibration studies and to carry out a scientific assessment of air overpressure and fly rock distances following blasting.
- xiii. Appropriate Higher capacity machinery to be planned to be used within the ML area in order to reduce the pollution. Accordingly, PP needs to submit an action plan.
- xiv. PP needs to reduce diesel consumption by proposing to deploy electric driven vehicles in the project.
- xv. PP should ensure that all the documents including the approved Mining plan and EIA/EMP should be in consonance with each other.
- xvi. The Project Proponent should submit an action plan to construct a water reservoirs within the mine lease area so that reliance on outside water is lessened/ eliminated.
- xvii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- xviii. PP should engage national reputed institute for scientific diversion studies. PP should consult State Water Resource Department for conservation, safeguards regarding the Nadis natural waterbodies, streams, rivers, etc. in

and near the project area. If required, NoC from Water Resource Department should be taken for the above water bodies, streams.

- xix. PP needs to plan for the construction of ponds, water storage or collection structures, and other rainwater harvesting systems to address the water levels and requirements of the area effectively.
- xx. 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.
- xxi. 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.
- xxii. 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.
- xxiii. The Project Proponent needs to prepare plan to develop the treatment facility for waste water within the ML area. STP should also be planned.
- xxiv. The Project Proponent can explore for establishment of nursery on 5 hectares, in collaboration with a reputable forest institute, to cultivate local species such as Khejri, Rohida, Senegalia senegal (commonly known as Khair, Kumththa, Babul) etc.
- xxv. The Project Proponent needs to furnish details of waste material handling plan and year wise back filling plan.
- xxvi. 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. Accordingly, PP shall prepare a wildlife Conservation Plan as per Wildlife Amendment Act 2022 and shall submit a proof of submission of the plan to State Forest Department.
- xxvii. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, and predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.

- xxviii. 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.
- xxix. 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.
- xxx. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the number of trees to be cut in the mine lease area and to explore the possibility of tree transplantation.
- xxxi. The Project Proponent needs to prepare the installation plan for permanent fixed water sprinkling system along the Haul roads.
- xxxii. The Project Proponent needs to plan for developing the Renewable energy facility within the ML area and incorporation of electric vehicle in order to reduce the dependency upon the diesel.
- xxxiii. 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 of number of saplings (at least 2500/ha) 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.
- xxxiv. 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.
- xxxv. PP needs to conduct the drone survey of the ML area and submit the same at the time of EC application.
- xxxvi. PP needs to submit an action plan for installation of ETP with Oil & Grease trap within the ML Area.

- xxxvii. PP needs to undertake the carrying capacity of the proposed road that is to be utilized for transportation of minerals till the installation of OLBC.
- xxxviii. PP needs to submit an action plan as per Ministry's OM dated 24.07.2024.
- xxxix. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF)/Project Displaced Families (PDF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. PP need to submit the plan for Socio economic development of the neighborhood habitats based on the need based survey along with the time bound action plan. PP also needs to submit the possession certificate and timeline for acquiring the land. Further, PP needs to submit the map demarcating the purchased land and non-purchased land if any at the time of appraisal of EC.
- xl. The Project Proponent needs to submit employment based skill development plan for the local people, and thrust should be to provide employment to local people after imparting training.
- xli. PP needs to submit an action plan regarding safeguarding or diversion of river, Natural streams in and around the lease area, in consultation with State Water Resources Department.
- xl.ii. PP needs to look after the alternate Charagah land area. PP should submit a detailed action plan to provide an alternate charagah land.
- xl.iii. PP needs to come out with the plan for the crusher installation.
- xl.iv. PP needs to project year wise backfilling plan
- xl.v. A slope stability study should be conducted through national institute of repute and incorporated into the EIA report. PP may also explore whether *study of seismic impact on the ecology and environment* of the area is required through the above institute.
- xl.vi. The PP shall ensure compliance of MoEFCC O.M. dated 14.01.2025 regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024.
- xl.vii. PP needs to comply the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked

33% greenbelt area as part of the tree plantation campaign “EK Ped Ma ke Naam” (एकपेड़माँकेनाम) and the details of the same shall be uploaded in the Meri Life portal (<https://merilife.nic.in>).

1.6 Chandi Fire Clay, Red & Yellow Ochre Mining Project with production capacity of 75000 TPA of mineral Fire Clay, Red & Yellow Ochre in the Mine lease area of 118.99ha by M/s Sampat Lal Daga located at Village Chandi, Tehsil Kolayat, District Bikaner, Rajasthan – For Terms of reference under the provision of Notification dated 06.04.2018 reg.

[Online Proposal no. IA/RJ/MIN/81158/2018, File No. J 11015/165/2018-IA.II (M), EIA Consultant – M/s Fulgro Environmental & Engg Services India Pvt. Ltd.]

The instant proposal for Terms of reference under the Ministry’s Notification S.O. 1530(E) dated 6.04.2018 for Chandi Fire Clay, Red & Yellow Ochre Mining with production capacity of 75000 TPA of mineral Fire Clay, Red & Yellow Ochre in the Mine lease area of 118.99ha by M/s Sampat Lal Daga located at Village Chandi, Tehsil Kolayat, District Bikaner, Rajasthan.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	The instant proposal for Terms of reference under the Ministry’s Notification S.O. 1530(E) dated 6.04.2018 for Chandi Fire Clay, Red & Yellow Ochre Mining with production capacity of 75000 TPA of mineral Fire Clay, Red & Yellow Ochre in the Mine lease area of 118.99ha by M/s Sampat Lal Daga located at Village Chandi, Tehsil Kolayat, District Bikaner, Rajasthan.	
Location	Village	Chandi
	Tehsil/Taluka	Kolayat
	District	Bikaner
	State / UT	Rajasthan
	Latitudes	27°55'16.16"N to 27°56'7.59"N
	Longitudes	72°59'46.94"E to 73° 0'44.39"E
	Sol Topo sheet No.	45A/13 and 45E/1
Company’s Name	M/s N.S. Envirotech Laboratories & Consultant PVT. LTD.	
Accredited Consultant and certificate no. and Validity	ADD-P. NO. 51, Ganeta House, Shiv Vihar Colony Near Patrakar Colony Road, Mansarovar Jaipur	
KML file	Online Upload	
Seismic zone	III	

ii. Category details:

Category of the project	B2
Schedule No.	1(a)
Mining lease Area (MLA) (in ha.)	118.99
General Conditions (if any)	NA

iii. ToR Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
03/09/2028	IA/RJ/MIN/81158/2018	22/04/2025	--	--

iv. 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
	Grant of Lease	24/04/1973	Fire Clay, Red & Yellow Ochre Mining	23/08/2035		118.99

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.	Sh. Sampat Lal Daga	24/04/1973	23/08/2035	Fire Clay, Red & Yellow Ochre Mining	118.99

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

Private land	(Govt. & Pvt. Land)
Government land	
Forest land	-
Total Mining lease area (MLA), ha	118.99ha
Private land for crusher, workshop & other infrastructure outside the MLA	-

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	SME/Bikaner-CIR/Min-Scheme/ Bianker/F-598/24/4720
	Date	03/01/2025
	Mineral & (Major/Minor)	Fire Clay, Red & Yellow Ochre Mining

	Mine Lease Area, Ha	118.99
	Validity	23/08/2035
Mining Parameters	Quantitative Description	
Method of Mining	Semi Mechanize	
Drilling/Blasting	No	
Geological Reserves	3942500	
Mineable Reserves	3014750.42	
Breakup of Total Excavation (Topsoil/ OB/ SB/ IB/ Mineral Rejects/ Waste, MTPA)	334972.27	
Life of mine	40 years	
Mine Bench Height & Bench Width	2x 2 M h	
No. of Mine Benches	3	
Existing Depth, m bgl	20 m	
Ultimate Depth of Mining, m bgl	214 MRL	
Ground Water Table, m bgl	130 m bgl	
Details of ground water intersection	NA	
Individual bench slope	-	
Overall pit slope	-	
Details of existing/ proposed Crusher	NA	
Mineral Beneficiation	-	
RoM output size	-	
Transportation details including capacity of dumper/tipper, mode of transport and distance	dumper	
Generation of Topsoil/OB & its Management during plan period & conceptual period	265625.00`	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	265625.00`	

vii. Water requirement:

Total water requirement	90 KLD	Fresh water	90 KL
		Treated water	0
Source	Tanker Supply		
Permission for withdrawal/ intersection along with details of grant and its validity	NA		

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

Particulars	Particular's Name	Distance &Directions
Village	Goyalri	2.40 Km towards NW direction
Town	--	--
Highway	NH-11	0.50 Km towards West
Interstate Boundary		
Railway Station/Railway line	Gajner Railway Station	4.94 Km towards ENE
Water Bodies	Gaj Sagar	distance of 3.38 Km distance towards NE
Forest	--	--

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	PP has submitted certificate vide letter dated 20.10.2023 issued from DFO, Bikaner wherein it mentioned that no forest land involved within the mine lease area.
National Park	No	PP has submitted certificate dated 31.05.2021 issued from DFO, Bikaner wherein it mentioned that no National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area.
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	No	-

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	-
Budget for green plant& plantation till the end of life of mine.	-
Budget for nursery	-
Details of existing plantation and its survival rate	-
No. of tree cuts in the mine lease area and compensatory afforestation	-
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	-
50 m safety zone of nallah, roads, electric lines	-

500 m safety zones of nearest habitation villages	-
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xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March- To May 2024
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-monsoon
Predominant Wind direction (From)	NE
Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	8
Soil Quality (no. of locations) and results	8
Hydro geological study and results	-
Traffic study (no. of locations) and results	2

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	Upload online
Consent to Operate	Upload online
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	PP has submitted the past production details from DMG , Bikaner vide letter dated 27.08.2021 and 23.12.2022

xiii. Rehabilitation & Resettlement (R&R):

R & R details	NA
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Court case details:

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

xiv. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	Upload online
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xv. PP has submitted the point-wise reply vide letter dated 15.04.2025 against the ADS raised on 09.04.2025 as mentioned below:

S.No	ADS Point	Reply by Project Proponent
1.	The Project Proponent need to submit the copy of Rider Agreement executed on 08/01/2016	PP has submitted the Rider Agreement Dated 08/01/2016.
2.	The project proponent needs to submit the application for the renewal of Mine lease submitted to State Government, if any.	PP has informed that the validity of mine lease up to 2035 so Renewal application is not applicable in our case.

3.	The project proponent needs to submit the clarification regarding distance of Gajner Wildlife Sanctuary from mine lease boundary duly authenticated by chief wild life Warden.	PP has submitted the distance certificate from DFO Bikaner indicating distance of Mines from the nearest National Wild Life Sanctuary/National Tiger Reserve/National Park.
PP has submitted the point-wise reply letter dated 30.05.2024 against the ADS raised 28.09.2021 as mentioned below:		
1	The project proponent needs to submit the latest certified compliance report from IRO.	PP has submitted the latest certified EC Compliance report vide letter dated 17.10.2022 by RO Ministry.
2	The project proponent needs to submit a letter of no mining activity including dump is outside the mine lease area duly authenticated by the authorities.	PP has submitted the duly authenticated by DMG-Bikaner
3	The project proponent needs to submit the breakup of total project cost.	PP has submitted the breakup of the total project cost
4	The project proponent needs to submit the certified past production details in the format of Annexure III.	PP has submitted the certified past production details in the format of Annexure III.
5	The project proponent needs to submit the approved mining plan.	As desired the approved mining plan. Also the current Mining Scheme with Mine closure plan is under approval phase.
6	The project proponent needs to submit the clarification regarding distance of Gajner Wildlife Sanctuary from mine lease boundary duly authenticated by Chief Wildlife Warden.	We would here like to inform you that we have requested to the concerned Department regarding clarification for distance of Gajner Wildlife Sanctuary from mine lease boundary and same is under Departmental process. Further, we would here like to request you to kindly allow us to submit the same at the time of appraisal of the project. However, a document from the DCF Office Bikaner regarding no wild Life Sanctuary/national Park located within 10 km radius of the project. Furthermore, there is no draft/final Notification available on MoEF & CC website also on the Gajner Wild Life Sanctuary.

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

Activities	Capital cost (Lakh)	Recurring cost (Lakhs/annum)
Construction Approach road will be covered with concrete 0 to 6 mm.	0	1.0
Greenbelt Development along the lease area, backfilled and approach road .(Tree, Water, Maintenance)	22.00	5.00
Environment monitoring	0	1.50
Fencing & Maintenance	2.0	0.50
Smart Garbage Bin	0.50	0.20

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	0.22
Project Cost	0.40
Employment (No.s)	-

3. Observation & Recommendation of the Committee:

The instant proposal is for Terms of reference under the Ministry's Notification S.O. 1530(E) dated 6.04.2018 for Chandi Fire Clay, Red & Yellow Ochre Mining with production capacity of 75000 TPA of mineral Fire Clay, Red & Yellow Ochre in the Mine lease area of 118.99ha by M/s Sampat Lal Daga located at Village Chandi, Tehsil Kolayat, District Bikaner, Rajasthan.

PP has obtained EC under the EIA Notification 1994, vide Ministry's letter no J-11015/257/2005-IA.II (M), dated 12.09.2006 for the production 75000 TPA of Fire Clay, Red & Yellow Ochre.

Thereafter, Project Proponent submitted an application to obtain Environmental Clearance under EIA Notification, 2006 under the Ministry's Notification S.O. 1530(E) dated 6.04.2018 for production capacity of 75000 TPA of mineral Fire Clay, Red & Yellow Ochre on 03.10.2018. The Proposal was earlier considered in the 38th EAC meeting held during 15-16th November, 2018 wherein the Project Proponent did not attend the meeting, therefore the Committee deferred the proposal. Further, the Committee considered the proposal in the 37th EAC Meeting held during 15-17th September 2021. The then EAC after detailed deliberation deferred the proposal for want of certain requisite information.

Now, the Project Proponent has submitted the point-wise reply against the observation of EAC & Ministry. PP has submitted the latest certified EC Compliance

report dated 07.03.2025 (Project inspected/monitored on 01.01.2025). With regard to no mining activity including dumping outside ML area, PP has submitted a letter dated 04.10.2021 from State DMG stating that the mining and dumping activity was carried out in the approved mining area only as approved by DMG, Bikaner (Rajasthan).

With regard to production, PP submitted State DMG authenticated production details vide letter dated 27.08.2021 and 12.04.2024. The mining plan has been approved by Office of Superintending Mining Engineer, Mines and Geology Department, Bikaner Circle, Govt of Rajasthan vide letter dated 03.01.2025.

PP has also submitted a letter dated 20.10.2023 issued from the office of DCF Bikaner stating that there are no National Park/ Wildlife Sanctuary located within 10 km radius of the instant mine lease. It has been further mentioned in the letter that no forestland is present within the ML area.

With regard to mine lease validity, PP submitted that in accordance with section 8A (6) of MMDR amendment ordinance 2015 dated 12/01/2015, the Lease validity has been extended upto 23/08/2035 and the rider Agreement was executed on 08/01/2016.

Regarding location of the ML area outside Aravalli Hills, PP has submitted a letter dated 24.06.2021 from DMG Bikaner stating the ML area doesn't fall in the range of Aravalli.

EAC noted the submission of PP and observed that PP has not submitted the SEIAA approved DSR for Fire Clay, Red & Yellow Ochre. EAC also noted that PP has operated the instant mine without valid CTO since 2018-19. Accordingly, EAC advised PP to submit the SEIAA approved DSR and clarification from SPCB for operating the mine without CTO.

In view of the above committee **deferred** the proposal and asked to submit the above information in detail.

- i. PP needs to submit the latest SEIAA approved DSR for the mineral Fire Clay, Red & Yellow Ochre.
- ii. PP needs to submit the clarification from SPCB for operating the mine without CTO since 2018-19.
- iii. In light of the Hon'ble Supreme Court's order dated 09.05.2024, Project proponent should consult state DMG regarding location of mine lease inside/outside Aravalli Hills and range.

- iv. PP shall comply with all the Orders/ Judgement of Hon'ble Supreme Court, Hon'ble Court, Hon'ble NGT or any court of Law in the Matter of Aravalli Hills/ Range.

Day 02 – 23rd April 2025 (Wednesday)

2.1 Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha - For Environmental Clearance (Violation) reg.

[Online Proposal No. IA/OR/MIN/497426/2024, File No. 23- 204/2018-IA.III (V)], EIA Consultant - Wolkem India Limited]

The instant proposal is for Environmental Clearance (Under Violation category, Ministry's notification S.O. 804(E) dated the 14th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:

i. Project details:

Name of the Proposal	The instant proposal is for Environmental Clearance (Under Violation category, Ministry's notification S.O. 804(E) dated the 14 th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha	
Location	Village	Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Barbil-7&8 & Uliburu RF
	Tehsil/Taluka	Barbil
	District	Keonjhar
	State / UT	Odisha
	Latitudes	22°07'41. 520"N to 22°09' 45.231" N
	Longitudes	85°23'03.481" E to 85°26'05.619" E
	Sol Topo sheet No.	73F/8

Company's Name	The Orissa Minerals Development Company Limited
Accredited Consultant and certificate no. and Validity	NABET Approved * Validity Date 11.06.2027
KML file	Yes
Seismic zone	Seismic Zone- II

ii. Category details:

Category of the project	A
Schedule No.	1(a)
Mining lease Area (MLA) (in ha.)	1276.79
General Conditions (if any)	NA

iii. ToR/EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of ToR	Date of accord
05.09.2017	J-11015/23-204/2018-IA III (V)	Yes	Approved by EAC	29.05.2020

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of accord
20.09.2024	IA/OR/MIN/497426/2024	Yes	Fresh	-

iv. 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.	Mining Lease		Iron ore	01.01.1941 15.08.1956	State Government of Odisha	7.723 SQ Miles
2.	1st renewal of Mining Lease	11.05.1961	Iron & manganese ore	16.08.1956 - 15.08.1986	State Government of Odisha	1276.79 Ha

3.	2nd renewal of Mining Lease	12.11.2002	Iron & manganese ore	16.08.1986 - 15.08.2006	State Government of Odisha	1276.79 Ha.
4.	Mining Lease period extension as Rule MMDR 2015.	03.02.2020	Iron & manganese ore	16.08.2006 to 15.08.2026	State Government of Odisha	1276.79 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		
•	Original	01.01.1941	15.08.1956	Iron ore	7.723SQ Miles
•	1st renewal	16.08.1956	15.08.1986	Iron & Manganese ore	1276.79
•	2nd renewal	16.08.1986	15.08.2006	Iron & Manganese ore	1276.79
•	Mining Lease period extension as Rule MMDR 2015.	16.08.2006	15.08.2026	Iron & Manganese ore	1276.79

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

Private land	580.883 Ha.
Government land	
Forest land	695.907 Ha. (Including SABIK Forest)
Total Mining lease area (MLA), ha.	1276.790 Ha.
Private land for crusher, workshop & other infrastructure outside the ML Area	NA

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/ DMG)	Letter No.	RMP/A/43-ORI/BHU/2020-21/2668
	Date	29.01.2021
	Mineral & (Major/ Minor)	Iron & manganese ore (Major)

	Mine Lease Area, Ha	1276.79
	Validity	31.03.2026
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining	
Drilling/Blasting	Yes	
Geological Reserves in Million Ton	Iron ore - 28.596 MTPA Manganese Ore - 13.985 MTPA	
Mineable Reserves in Million Ton Production (2025-26)	Iron ore - 24.625 MTPA Manganese Ore - 11.183 MTPA Iron 1.8 Million Tonnes per annum. Mn 0.3 Million Tonnes per annum	
Top Soil (2025-26)	Nil	
Overburden (2025-26)	Iron: 139600 MT, Mn: 44400 MT	
Life of mine	Iron ore 14 years, Manganese ore 37 years	
Mine Bench Height & Bench Width	Height/ width of the benches will be kept at 9m/ 12m in iron ore zone and 6m/ 10m in manganese ore zone respectively.	
No. of Mine Benches	05 Nos.	
Existing Depth, m bgl	25 m bgl	
Ultimate Depth of Mining, m bgl	35m bgl	
Ground Water Table, m bgl	65m bgl	
Details of ground water intersection	NO	
Individual bench slope	(65-70) Degree	
Overall pit slope	45 ⁰	
Details of existing/ proposed Crusher	Proposed crusher = 2 nos. capacity 200 TPH and 100 TPH Proposed screen plant=2 nos. capacity 400 TPH and 200TPH	
Mineral Beneficiation	No	
RoM output size	-300mm	
Transportation details including capacity of dumper/tipper, mode of transport and distance	Dumper/tipper 25 Tones	
Generation of Topsoil/OB & its Management during plan period & conceptual period	NIL	
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Waste will be dumped in the non-mineralised earmarked area as per approved mining plan & will be utilized for back-filling of mined out area.	

vii. Water requirement:

Total water requirement	200 KLD	Fresh water	200 KLD
		Treated water	NIL
Source	Proposed Bore well & Surface water (Nalda Pond of M/s OMDC Ltd)		
Permission for withdrawal/ intersection along with details of grant and its validity	NOC Obtained vide letter no. CGWA/NOC/MIN/ORIG/2021/10964, Valid Upto 15/02/2025. Permission granted for 80 KLD of ground water from CGWA and balance 120 KLD of surface water will be drawn from Nalda Pond of M/s. OMDC Ltd. Renewal is under process.		

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

Particulars	Particular's Name	Distance & Directions		
Village	Belkundi, Nalda, Karakolha, Karakhendra, Uliburu, Barbil 7 & 8& Uliburu R.F	Within and adjoining villages		
Town	Barbil	3.0 kms		
Highway	NH 215	8.30 Kms in South		
Interstate Boundary	Adjoining to ML area	0 km		
Railway Station/ Railway line	Barbil R.S.	3.0 Kms. SSW direction.		
Water Bodies	Nalda Pond	In ML area		
Forest	S. No	Name	Distance (Km.)	Direction
	1	Nuia PF	~ 3.5	N
	2	Ghatkuri PF	~ 3.0	NW
	3	Noamundi PF	~ 3.0 &	E
	4	Siddhamath RF	~ 10.0	S
	5	Pandrasali PF	~ 4.0	E
	6	Tatiba PF	~ 4.5	W

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 Department concerned mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	695.907 ha (Including SABIK Forest), MoEF& CC, Govt. of India vide letter dated 14.09.2022 had granted coterminous extension of Forest Clearance over an area of

		384.54 ha with extended mining lease period i.e. up to 15.08.2026.
National Park	NO	The PP has submitted an authenticated map of Odisha Showing Distance Of 1276.790 Ha Belkundi Mines in Thakurani Reserve Forest Under Keonjhar Forest Division Of M/s Orissa Mineral Development Company Limited Under Barbil Tahasil, District Keonjhar Odisha from National Parks/ Sanctuaries/ Elephant /Tiger Reserve/ Biosphere Reserve Elephant Corridors and Ramsar Sites.
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	Elephant & Sloth Bear, Memo No - 4074/CWLW-FDWC-FD-0108-2024 dated 04 th April 2025.
Wildlife Conservation Plan	Yes	PP has obtained the certificate from Chief Conservator of Forest (WL-II) vide letter dated 04.04.2025.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	421.34 ha, Sampling Nos. 6,20,310
Budget for green plant & plantation till the end of life of mine.	Rs. 100 lakhs & 33 % plantations will be developed.
Budget for nursery	NIL
Details of existing plantation and its survival rate	23.40 Ha & 23,400 Nos. & 80 % Survival rate
No. of tree cuts in the mine lease area and compensatory afforestation	268.827 Ha. of CA land
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	11.412 Ha (ML Boundary)
50 m safety zone of nallah, roads, electric lines	120.513 Ha (50m along the water course, 10m along village road, 50m along state highway & 50m along Railway line)
500 m safety zones of nearest habitation villages	NA

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	1 st October to 31 st December 2019 & Re-validation in October 2022
Season (Summer/Pre-monsoon/Post-monsoon/ Winter)	Post Monsoon
Predominant Wind direction (From)	NW
Ambient Air Quality (no. of locations) and results	8
Noise level (no. of locations) and results	8
Water Quality (no. of locations) and results	SW 2 & GW 5
Soil Quality (no. of locations) and results	7
Hydro geological study and results	Yes
Traffic study (no. of locations) and results	1

xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	22.07.2024, The Times of India & Dharitri
Date of PH	11:00 AM on 17.08.2024
Venue	Mouza - Barbi, Unit -7
Chaired by	ADM – Sri. Jadumani Mahala, ADM, Keonjhar RO – Er. Prasanta Kar, RO, SPCB, Keonjhar
Main issues raised during PH	Demanded Employment to locals and Concern about environment related to local environment.
Budget proposed for addressing issues raised during PH over 3 years	50 lakhs capital and 5 lakhs recurring.

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	PP has obtained CTE vide letter no. 21645-IND-II-NOC-3878, dated 25.08.2006
Consent to Operate	PP has obtained revised consent order no. 20788/ IND-I-CON-179, dated 1 9.12.2009, consent order no 397, and the valid upto 31.03.2011

xiv. Rehabilitation & Resettlement (R&R):

R & R details	A study got conducted by M/s Shubhadra Consultant and report was prepared and submitted to Revenue and Disaster Management Dept., Govt. of Odisha. In response of this, a letter vide no. RDM-RRC-POLICY-0002-2023-9422/R&DM dated 14.03.2023 stating that “the land has not been acquired under L.A. Act, 1894 or RFCTLAR&R Act, 2013. Also, there is no displacement/ loss of livelihood in the project area. It is a study report and does not contain any R&R plan. So, it does not require approval by Revenue & DM”.
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xv. Court case details:

Court Case, No and its present status	A case in District Court JMFC Court, Barbil, and Odisha with Case no. 2(C).C.C. case No. 114/2013 dated 31.07.2013 is under process and outcome is awaited. Last hearing date is 03.10.2024.
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xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The project proponent has submitted an Affidavit as per Ministry's OM dated 30.05.2018 bearing no. N687657 dated 26.09.2024.
Undertaking by Project Proponent in EIA/EMP report	The project proponent has submitted an undertaking vide affidavit no. N687657 dated 26.09.2024 with EIAEMP report.
Undertaking by Consultant in EIA/EMP report	EIA Consultant-Wolkem India Limited has submitted an undertaking with the EIA-EMP report.
Plagiarism Certificate	PP has submitted a software generated plagiarism certificate vide letter dated 20.09.2024

xvii. PP has submitted point-wise reply vide letter dated 09.04.2025 against the ADS raised during 34th EAC meeting held on 04th October 2024 as mentioned below:

S. No.	ADS Point	Reply by PP
1	The Project Proponent must submit either the Stage-I Forest Clearance (FC) for the remaining forest area or a restrictive mining plan for the already diverted forest land (384.54 ha), for which Stage-II FC is available, and the non-forest land (580.883 ha).	Mining plan (restricting over the already diverted forest land and the non-forest land) is approved by IBM vide No. RMP-2351/2024-25-IBM_RO_BBS dated 08.04.2025 with validity till 31.03.2026.

2	The Project Proponent is required to submit the site-specific wildlife conservation plan along with proof of its submission to the Forest Department.	The Site-Specific Wildlife Conservation Plan has approved vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04 th April 2025.																												
3	The Project Proponent must upload the complete Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) report on the Parivesh Portal.	Complete EIA & EMP report along with all relevant Annexures is uploaded on Parivesh Portal.																												
4	The Project Proponent needs to submit an action plan to ensure that more than 70% of the ore is transported through the railway siding, with the remaining 30% transported by road.	<p>The suggestion of the Hon'ble Committee is noted and management of OMDC Limited will try to incorporate the same by adopting the following activities:</p> <p><u>For Railway Siding</u></p> <ul style="list-style-type: none">• The possibility of 70% ore transportation through railway siding will be explored and implemented after obtaining requisite approval from railways.• Details of railway siding available within 10 km radius are as below: <table><tr><th>S. No.</th><th>Railway Siding</th><th>Distance (Kms.)</th><th>Direction</th></tr><tr><td>1</td><td>Bara Jamda, Jharkhand</td><td>0.32</td><td>N</td></tr><tr><td>2</td><td>Barbil Train Station, Odisha</td><td>3.24</td><td>SSW</td></tr><tr><td>3</td><td>Gua train Station, Jharkhand</td><td>6.53</td><td>NNW</td></tr><tr><td>4</td><td>Deojhar Train Station, Odisha</td><td>7.67</td><td>SE</td></tr><tr><td>5</td><td>Murga Mahadev Road Train station, Odisha</td><td>8.76</td><td>SSE</td></tr><tr><td>6</td><td>Noamundi Train Station, Jharkhand</td><td>8.96</td><td>E</td></tr></table>	S. No.	Railway Siding	Distance (Kms.)	Direction	1	Bara Jamda, Jharkhand	0.32	N	2	Barbil Train Station, Odisha	3.24	SSW	3	Gua train Station, Jharkhand	6.53	NNW	4	Deojhar Train Station, Odisha	7.67	SE	5	Murga Mahadev Road Train station, Odisha	8.76	SSE	6	Noamundi Train Station, Jharkhand	8.96	E
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6	Noamundi Train Station, Jharkhand	8.96	E																											

		<table><tr><td>7</td><td>Joda Block Cabin train station, Odisha</td><td>10.00</td><td>S</td></tr></table> <p>Note: Availability of railway racks is subjected to approval by the office of SE Railway.</p> <p><u>For Transportation by Road</u></p> <ul style="list-style-type: none">• The remaining 30% ore shall be transported through the road.• No transportation of minerals will be allowed through the roads passing through villages/habitations.• Dispatch is done only through National Highway/ State Highway.• PUC checks will be mandatory on a regular basis.• Speed restrictions on vehicles will be imposed to avoid any unforeseen event.	7	Joda Block Cabin train station, Odisha	10.00	S						
7	Joda Block Cabin train station, Odisha	10.00	S									
5	The Project Proponent should provide an action plan for the construction of rainwater harvesting facilities within the lease area.	<ul style="list-style-type: none">• Project proponent is conscious towards the use of natural resources and planning to use groundwater for drinking and domestic purposes only in future operations.• For mining and associated operations, rainwater stored on the mine pit will be used.• However, till the validity of present NOC of CGWA, groundwater will be used initially as the company has already paid the abstraction charges.										
<p align="center">Measures For Rainwater Harvesting</p> <p>Proposed depth of working and groundwater levels indicate that there is no possibility of puncture of ground water table in plan period and seepage/accumulation of ground water on the quarry floor. The source of water in the mine are:</p> <p>(a) Rainfall / direct precipitated water and</p> <p>(b) Surface run-off water from the adjacent pit top area at higher levels around the pit/ quarry. However, the quantity of water likely to be encountered in the pit is estimated below:</p> <table><tr><th>Description</th><th>Quantity</th></tr><tr><td>Pit area at the end of plan period</td><td>160.528 ha / 1,605,280m²</td></tr><tr><td>Adjacent pit top area (assuming 10% of pit area)</td><td>= 160,528m²</td></tr><tr><td>Total catchment area</td><td>1,605,280 + 160,528 = 1,765,808m²</td></tr><tr><td>Annual rainfall</td><td>1503mm or 1.503m</td></tr></table>			Description	Quantity	Pit area at the end of plan period	160.528 ha / 1,605,280m ²	Adjacent pit top area (assuming 10% of pit area)	= 160,528m ²	Total catchment area	1,605,280 + 160,528 = 1,765,808m ²	Annual rainfall	1503mm or 1.503m
Description	Quantity											
Pit area at the end of plan period	160.528 ha / 1,605,280m ²											
Adjacent pit top area (assuming 10% of pit area)	= 160,528m ²											
Total catchment area	1,605,280 + 160,528 = 1,765,808m ²											
Annual rainfall	1503mm or 1.503m											

Quantity of rainfall	$1,765,808 \times 1.503 = 2,654,010\text{m}^3$
Rainwater likely to be evapo-transpired (assuming 50% of total rainfall)	$2,654,010 \times 50\% = 1,327,005\text{m}^3$
Rainwater is likely to seep into the sub-surface (assuming 20% of total rainfall)	$2,654,010 \times 20\% = 530,802\text{m}^3$
Rainwater likely to be accumulated in the pit (the remaining 30% of total rainfall)	$2,654,010 \times 30\% = 796,203\text{m}^3$

Annual rainfall, catchments area and likely quantity of rainwater to flow through the lease area: Average annual rainfall is 1503.3 mm. The south-west monsoon lasts from mid-June to mid-September and the area receives more than 70% to 80% of the annual rainfall during the period. Likely quantity of rainwater to flow through the lease area has been calculated as follows:

Description	Quantitative Aspects
M.L area	= 1276.790 ha
Quarry as well as surrounding area	= 1,765,808m ² or 176.581 ha
Remaining area in the M.L area	= 1276.790 + 176.581 = 1453.371 ha / 14,533,710m ²
Annual rainfall	1503.3mm or 1.503m
Quantity of rainfall	$14,533,710\text{m}^2 \times 1.503\text{m} = 21,844,166\text{m}^3$
Rainwater is likely to be evapo-transpired (assuming 50% of total rainfall)	$21,844,166 \times 50\% = 10,922,083\text{m}^3$
Rainwater is likely to seep into sub-surface (assuming 20% total rainfall)	$21,844,166 \times 20\% = 4,368,833\text{m}^3$
Rainwater is likely to flow in the lease area (remaining 30% total rainfall)	$21,844,166 \times 30\% = 6,553,250\text{m}^3$

Arrangement for arresting solid wash off: Protective measures like retaining wall, garland drain and settling tank will be built up around the lower level of waste dumps to arrest the wash-off materials and release clean water. Boulders of waste materials will be utilized for construction of retaining walls. Sand and cement will be used for the binding of the boulders. Garland drains will be developed around waste dump beyond the retaining wall to receive run-off water coming out of the retaining wall and settling tank will be made en-route to receive the run-off water from garland drain to settle the sediments and release clean water. Details of the construction/ arrangement and maintenance around waste dumps for arresting solid wash-offs in the plan period will be as follows:

Year	Location	Retaining wall (m)			Garland drain (m)			Settling tank (m)		
		L	W	H	L	W	D	L	W	D

1 st (2025-26)	Dump-ID/1	350	1	1.5	350	1	1	10	5	3
	Dump-MD/1	325	1	1.5	325	1	1	10	5	3
	Dump-MD/2	250	1	1.5	250	1	1	10	5	3
2 nd (2026-27)	Dump-ID/1	350	1	1.5	350	1	1	---	---	---
	Dump-MD/1	325	1	1.5	325	1	1	---	---	---
	Dump-MD/2	250	1	1.5	250	1	1	---	---	---
Balance Period	Dumps as above	Maintenance			Maintenance			Maintenance		

The retaining wall will be repaired/ maintained, and garland drain as well as settling tank will be cleaned/ de-silted throughout the plan period as and when necessitated preferably just after the monsoon seasons.

6	The Project Proponent is required to revise the budget for the proposed remediation plan and the natural and community resource augmentation plan, taking into account the damages to the receptors.	As suggested by the Hon'ble Committee, the Remediation Plan and Natural and Community Resource Augmentation Plan has been revised considering the receptors i.e. affected due to mineral transportation from mine lease to dispatch point. Now, after revision, the total cost is Rs. 4, 81, 41,000/-.
7	The budget for plantation of 6, 20,310 trees over 400 ha needs to be submitted with timeline for plantation. The proposed amount of Rs. 7.5 lakh for plantation under EMP is not adequate given the types of plants selected. Accordingly, PP needs to submit the revised budget.	The Plantation programme with respect to timeline and cost of plantation has been revised.

Year	Location	Area (Ha.)	No. of plants	Cost of plantation (INR)	Species
Existing Plantation	Lease boundary,	23.40	23,400	--	Karanja (Pongamia Glabra),

	Mined out area & Reclaimed area				Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman) Chhatian (Alstoniascholaris) Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc.
2025-26	Safety Zone +	14.50	10,000	25,00,000	
2026-27	Available open area	57.13	44,945	1,12,36,250	
Till Conceptual Stage	Safety Zone + Dumps + Other available areas	326.31	5,41,965	13,54,91,250	
Total		421.34		14,92,27,500	

xviii. Project Proponent has submitted the following revised Budget for Proposed Remediation Plan & Natural and Community Resource Augmentation Plan:

a. Revised Proposed Remediation Plan and Natural & Community Resource Augmentation Plan (NCRAP):

i. Remediation Plan & Budgetary Provisions (revised):

S. No.	Particulars	Remediation Budget (INR)
1.	Land Environment	Plantation = Rs. 42,16,000/-
2.	Air Environment	Air Monitoring = Rs. 15,00,000/-
3.	Water Environment	Rainwater Harvesting & Construction of septic tank & soak pit = Rs. 10,00,000
4.	Noise Environment	Earplugs for labour= Rs. 7,50,000
5.	Biological Environment	Plantation and green belt development inside premises= Rs. 22,50,000
6.	Socio-Economic Environment	Solar Light – Rs. 7,50,000
Total		Rs. 1,04,66,000/-

• Revised Remediation Plan and Budgetary Provisions with Timeline:

S. No.	Particulars	Remediation Budget (INR)			Total budget (INR)
		1st year	2nd year	3rd year	
1.	Land Environment	14,05,334	14,05,334	14,05,334	42,16,000
	Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces. Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc. Approx. 1800 Plants Per Year				

	Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Location: Water sprinkling at approach Road from Mine to 500 m distance towards villages/ habitation with frequency of daily basis. Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
2.	Air Environment (Monitoring)	5,00,000	5,00,000	5,00,000	15,00,000
	Air Monitoring: Proposed at 8 locations on a quarterly basis frequency. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.				
3.	Water Environment	4,00,000	3,00,000	3,00,000	10,00,000
	Rainwater Harvesting: RWH and Construction of septic tank & soak pits. Total No. of RWH = 2 Buildings Per Year Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.				
4.	Noise Environment	2,50,000	2,50,000	2,50,000	7,50,000
	Noise Monitoring: Noise Monitoring proposed at 6 locations near ML Boundary on a quarterly basis and Earbuds/ earplugs for workers safety. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7.				
	Vibration Monitoring: At Six locations around Mine Lease within 500 m locations of Lease periphery. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
5.	Biological Environment	7,50,000	7,50,000	7,50,000	22,50,000
	Flora - Plantation (as per schedule) and green belt development in inside premises. Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces. Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc. Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Fauna - Conservation of schedule-I species in the study area.) As per approved site-specific wildlife conservation plan vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04th April 2025.				
6.	Socio-Economic Environment	2,50,000	2,50,000	2,50,000	7,50,000
	(Solar lights = Total 10 nos. per year @ Rs. 25,000/- with pole)				

Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu.				
Total				1,04,66,000/-
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 10,46,600/				

ii. Natural Resource Augmentation Plan:

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
1.	Avenue Plantation (2500 m)	7,50,000	7,50,000	7,50,000	22,50,000
	500 plants with tree guards on each side of the road (1000 plants x Rs. 750 each) and its maintenance till self-sustenance (1000 x 100) Locations: Nalda, Karakhendra, Belkundi, Karakolha	1,00,000	1,00,000	1,00,000	3,00,000
Sub-total		8,50,000	8,50,000	8,50,000	25,50,000
2.	Installation of Rainwater harvesting at 15 buildings per year in nearby Govt. Schools/ Hospitals/ Panchayats/ Community Centers/ Other premises in study area/ Keonjhar district. (45 nos.) (unit price approx. 2,00,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	30,00,000	30,00,000	30,00,000	90,00,000
3.	Recharge Ponds for groundwater recharge in 15 structures every year with minimum dimensions of 5x4x3 m = 60 Cu.m each (45 nos.) (unit price approx. 1,40,000/-)	21,00,000	21,00,000	21,00,000	63,00,000

	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Total				1,78,50,000
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 17, 85,000/-					

iii. Community Resource Augmentation Plan:

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1 st year	2 nd year	3 rd year	
1.	RO with water cooler at 25 Govt. Schools/ Hospitals/ Panchayats/ each year (Total 75 nos. in 3 yrs) (unit price approx. 25,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	6,25,000	6,25,000	6,25,000	18,75,000
2.	Distribution of 20 Computer every year in Govt. School (Total 60 nos. in 3 yrs) (unit price approx. 45,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	9,00,000	9,00,000	9,00,000	27,00,000
3.	Goat farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 1,00,000/-)	10,00,000	10,00,000	10,00,000	30,00,000

	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
4.	Poultry farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	5,00,000	5,00,000	5,00,000	15,00,000
5.	Mushroom farming training and financial assistance to 5 farmers every year (Total 15 nos. in 3 yrs) (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	1,00,000	1,00,000	1,00,000	3,00,000
6.	Sewing machine distribution to local female for financial stability & income generation at least 20 every year (Total 60 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary	2,00,000	2,00,000	2,00,000	6,00,000

	Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
7.	Installation of Solar Panels in Govt. Schools, Hospitals, Panchayats in the Study Area 25 nos. of building every year (Total 75 nos. in 3 yrs) (unit price approx. 80,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	20,00,000	20,00,000	20,00,000	60,00,000
8.	Skill development programmes for young people with a target of 25 people every year (Total 75 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,50,000	2,50,000	2,50,000	7,50,000
9.	Supply of Agriculture water pumps for locals on need based and promotion of sprinkling and drip irrigation for 10 nos. every year (Total 30 nos. in 3 yrs) (unit	5,00,000	5,00,000	5,00,000	15,00,000

	price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
10.	Awareness program for reduction of plastic waste reduction/ solid waste management in 10 villages every year (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,00,000	2,00,000	2,00,000	6,00,000
	Total				1,88,25,000
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 18,82,500/-					

A. Economic Benefit derived due to violation:

Saving interest on the cost of environmental protection measures and other activities is approximately Rs. 10,00,000 to be spent for medical camp organisation for locations/ providing medical equipment on need based to local Primary Health Center/ Hospitals at Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.

Recurring cost considered @10% of the total cost. Hence, it is Rs. 1,00,000/-.

B. Total budget for Remediation, Natural & Community Resource Augmentation Plan and Economic Benefit:

S. No.	Particulars	Proposed Capital Budget (INR)	Proposed Recurring Budget (INR)
1.	Remediation Plan	1,04,66,000/-	10,46,600
2.	Natural Resource Augmentation Plan	1,78,50,000	1,78,50,00
3.	Community Resource Augmentation Plan	1,88,25,000	1,88,25,00
4.	Economic Benefit Derived due to violation	10,00,000	10,00,00

Total	INR 4,81,41,000/-	4,81,41,00
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xix. Details of the Environmental Management Plan (EMP):

Activities	Capital cost (Lakhs)	Recurring cost (Lakhs/annum)
Pollution Control & Conservation of Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)	40	4.0
Pollution Monitoring (Air, soil, Water, Noise) including CAAQMS installation at mine site	110	11.0
Occupational Health & Safety	10	2.5
Green Belt Development	10	5.0
Miscellaneous (Fencing, protection, regeneration and maintenance of safety zone)	30	2.
Public Hearing Action Plan	50	5
Total	250	30

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	2.5
Project Cost	121.08
Employment (No.s)	814

xxi. The Project Proponent has submitted the demand notice raised from Office of Director of Mines, Joda Circle vide letter no. 4090/mines dated 02.09.2017 against M/s OMDC Ltd for an amount of Rs. 92,44,97,787.00/- (Ninety Two Crore Forty Four Lakhs Ninety Seven Thousand Seven Hundred Eighty Seven Only). The Project Proponent has submitted the e-challans against demand raised vide letter no. 4090/mines dated 02.09.2017.

3. Observation and Recommendation of the Committee:

EAC deliberated on the Instant proposal for Environmental Clearance (Violation category, under Ministry's notification S.O. 804(E) dated 14th March, 2017) for Belkundi Iron & Manganese Ore Mines for enhancement of Iron ore production to 1.8 MTPA and Manganese ore to 0.3 MTPA in the Mine Lease area of 1276.79 Ha by M/s Orissa Mineral Development Company Ltd located at Villages Belkundi, Nalda, Karakolha, Karkhendra, Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

The project is classified under Category "A" and falls under Activity 1(a) of the schedule of the EIA Notification, 2006.

The Project Proponent and the consultant presented the KML file and explained the site's features to the committee. Within and adjoining villages include Belkundi,

Nalda, Karakolha, Karkhendra, Uliburu, Barbil Unit-7 & 8 and Uliburu R.F. The nearest railway station is Barajamda situated at 0.25 km and Barbil is situated about 3.0 km to the south-southwest (SSW) of the site. The Committee asked the Project Proponent to establish and try to operationalise Railway Siding in the ML area. From the kml file submitted by PP it appears that some portions of the ML area lies in Jharkhand State. PP must clarify about the same.

PP stated that State Highway SH-10B passes through the lease area, while National Highway NH-215 is located 8.3 km to the south. It was also stated that Nalda Pond lies within the Mining Lease (ML) area. The Project Proponent confirmed that there are no National Parks, Wildlife Sanctuaries, or Tiger/Elephant Reserves within 10 km radius of the project site. A total of Six Protected Forests (PFs) is present within the study area. The approved Site-Specific Wildlife Conservation Plan has been submitted vide letter dated 04.04.2025.

The lease was executed from 01.01.1941 to 15.08.1956. First lease renewal was done from 16.08.1956 to 15.08.1986 for 30 years and executed in favor of M/s OMDC. Subsequently, second lease renewal was done for a period of 20 years with effect from 16.08.1986 to 15.08.2006. Application for third renewal was made on 12.08.2005 as per Rule 24(A) (1) of Mineral Concession Rule, 1960. State Government of Odisha issued letter vide no. III (A) SM-04/2010/1072/SM, Bhubaneswar dated 03.02.2020 stating the validity of mine lease, extended till 15.08.2026 in favor of M/s OMDC Ltd.

The total lease area of the Belkundi Mines, operated by M/s Orissa Minerals Development Company Ltd, is 1,276.79 ha. Of this, 580.883 hectares consist of private land, while the remaining 695.907 hectares is classified as forest land. The Project Proponent stated that they have obtained Forest Clearance (FC) Stage II for 384.54ha of forest land, as per the Ministry's letter dated 14th September 2022. The Project Proponent will conduct mining activities within this diverted forest area.

The Modification of Review of Mining Plan, along with the Progressive Mine Closure Plan, was approved on 29.01.2021 and is valid till 31.03.2026. The Expert Appraisal Committee (EAC) acknowledged the submissions of the Mining plan (restricting over already diverted forest land and the non-forest land) approved by IBM vide No. RMP-2351/2024-25-IBM_RO_BBS dated 08.04.2025 with validity till 31.03.2026. The Modification of Review of Mining Plan is submitted under Rule 17(3) of MCR, 2016 for One (1) Year Of 2025-26 To Comply One of the Conditions for Restriction of the Working in Already Diverted Forest Land Area over 384.54 Ha for Which Stage-II FC Is available and Non-forest Land over 580.883 Ha. The existing depth of mining is 25 m bgl. The groundwater table in the area is at a depth of 65m bgl and Ultimate mine working depth will be 35m bgl. Therefore, the mining operations will not intersect the water table.

The total water requirement is 200 KLD (Fresh water), proposed to be met through Bore well & Surface water (Nalda Pond of M/s OMDC Ltd). Out of 200 KLD, 120 KLD will be drawn from Nalda Pond of OMDC for meeting the mine's requirements

for Dust Suppression (80KLD) & Green Belt Development (40KLD). The rest 80 KLD of water will be drawn from 02 nos. of bore wells for which NOC from CGWA has been obtained and was valid upto 15/02/2025. As per PP application for renewal of permission is currently under process.

The Project Proponent has planned a greenbelt/plantation covering a total area of 421.34 ha. A total of 6,20,310 saplings will be planted, with an estimated expenditure of Rs. 100 lakhs and 33 % plantations will be developed.

Baseline data was collected during the post-monsoon season (1st October to 31st December 2019 & Re-validated in October 2022), with the predominant wind direction observed from NW. Studies conducted included Ambient Air Quality, Noise Levels, Water Quality, Soil Quality, Hydrogeological Study and Traffic Study.

PP submitted that public hearing was held on 17.08.2024, under the chairmanship of ADM, Keonjhar and RO, SPCB, Keonjhar. PP presented that they have earmarked a budget of Rs. 90 lakhs under public hearing action plan. EAC noted the submission of PP and advised to make the action plan monitorable.

Regarding transportation, the Committee asked to explore the increasing the capacity of trucks for transporting minerals from Mine site to the nearest Railway siding. Committee also asked to obtain permissions for separate rakes from the officials of Railway for this particular mine.

It was also observed that a seasonal Nallah enters from the eastern side flows across the western lease boundary which dissects the lease area into northern and southern parts, which is a tributary of Karo River. The Committee also asked to submit HFL data of the nallah from the State officials of Odisha.

During the discussions, the Committee also observed that the few industries, sponge iron plant, pellet plant are located within the ML area. PP informed that these industries are operational and transportation to and fro the above industry occurs through the mine lease area. Accordingly, EAC asked the Project Proponent to obtain the clarification for the same from State DMG.

Thereafter, PP presented the Remediation Plan & Natural and Community Resource Augmentation Plan. EAC noted the submission of the PP and observed that plan is neither tangible nor monitorable. Accordingly, EAC advised PP to revise the same.

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

- i. PP needs to submit the Monitorable and Tangible Environmental Management plan excluding the budget allocated for Public Hearing.
- ii. PP needs to submit the Monitorable and Tangible Public Hearing action plan.

- iii. PP needs to submit the Monitorable and Tangible Remediation Plan & Natural and Community Resource Augmentation Plan.
- iv. PP needs to submit a copy of the certificate from State Forest Department regarding the presence of National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area.
- v. The Project Proponent needs to consult Railway Department to obtain permissions for separate railway rakes from the nearest Railway siding for transporting the mined out ore.
- vi. The Project Proponent needs to consult Stated Water Resource Department with respect to the nallah present in the ML area.
- vii. The Project Proponent needs to obtain a clarification from the State DMG regarding the presence of sponge iron and pellet plant within the ML area. State DMG should indicate whether the above plant areas shall be removed from the lease while executing the lease deed?
- viii. PP also needs to submit the details of the area within the ML for which it has already obtained surface rights since the instant mine was under operation earlier.
- ix. The Project Proponent needs to submit detailed information regarding the geological reserves and mineable reserves available within the ML area.
- x. PP needs to submit communication with Indian Bureau of Mines regarding reserve and production plans in the ML area after exclusion of areas of the sponge iron and pellet plant. PP also needs to explain about the partial mine closure that was reported and discussed by them during EAC meeting.
- xi. PP needs to inform DGMS regarding sponge iron and pellet plant within the lease area and transportation of ore/ finished products for these plants within the lease area.
- xii. In the EIA-EMP report, PP should include the impacts of sponge iron plant, pellet plant in the lease area on the air, water, land, noise, etc. environment. Mitigation plans should also be mentioned in the EIA- EMP report.
- xiii. PP needs to submit the authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Act, 2022.

- xiv. PP needs to submit the copy of approved wildlife conservation plan as per the Wildlife (Protection) Amendment Act, 2022.
- xv. PP must clarify about the portions of ML area that appears lying in the Jharkhand State, as per KML file submitted by them.

2.2 Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216 MTPA & existing capacity of Manganese Ore (ROM) 0.036 MTPA & OB 0.223 MTPA with total Excavation 0.259 MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha - For Environmental Clearance reg.

[Online Proposal No. IA/AP/MIN/482860/2024, File no. J-11015/62/2020- IA. II (M), EIA Consultant M/s J. M. Environet Pvt. Ltd.]

The instant proposal is for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216 MTPA & existing capacity of Manganese Ore (ROM) 0.036 MTPA & OB 0.223 MTPA with total Excavation 0.259 MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha.

2. The details of Project submitted by the Project Proponent are given as under:
 - i. The mine lease area is located between Latitude 21°54'46.07" N to 21°56'23.13" N Longitude 85°13'41.16" E to 85°14'56.56" E. The mine lease area falls under the Survey of India Toposheet No. Core Zone F45N1 (73G/1), F45N5 (73G/5) and Buffer zone: F45N1 (73G/1), F45N5 (73G/5), F45H8 (73F/8), F45H4 (73F/4) and falls in Seismic Zone-II.
 - ii. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2 (b) for Mineral Beneficiation falls under Category "A" as the mining lease area is greater than 250 ha and appraised at the Central level.
 - iii. The Project Proponent has obtained the ToR vide letter no. J-11015/62/2020-IA.II (M) dated 31.12.2020 and subsequent amendment vide letter no. J-11015/62/2020-IA.II (M) dated 18.02.2022.
 - iv. Details of Mine Lease:

S. No.	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Letter No.	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Issuance of Letter of Intent in favor of JSW Steel Ltd. vide letter no. 2288/S&M/IV(Misc) SM-66/2016(Pt-I)	02.03.2020	Iron & Manganese Ore	03 years	Govt. of Odisha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
2	Issuance of Vesting Order in favor of JSW Steel Ltd. vide letter no. 4212/SM IV (B) SM-21/2020	30.05.2020	Iron & Manganese Ore	2 years	Govt. of Odisha	
3	Permanent Vesting Order was issued in favour of JSW Steel Ltd.	15.02.2022	Iron & Manganese Ore	-	-	

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 was granted & executed in favor of M/s. JSW Steel Ltd.	26.06.2020	25.06.2070	Iron & Manganese Ore	ML Area 347.008 Ha (As per DGPS) / 349.254 Ha (As per ROR)
2.	Mine Lease was registered in favor of M/s. JSW Steel Ltd.	27.06.2020	26.06.2070	Iron & Manganese Ore	

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

Private land	4.687 ha
Government land	55.648 ha
Forest land	257.451 Ha

Total Mining lease area (MLA), ha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
Private land for crusher, workshop & other infrastructure outside the MLA	All the activities proposed within mine lease
Additional information (if any)	29.222 ha is ST Land

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	MPM/A/08-ORI/BHU/ 2021-22/742
	Date	05.08.2021
	Mineral & (Major/Minor)	Major
	Mine Lease Area, Ha	ML Area 347.008 Ha (As per DGPS)/349.254 Ha (As per ROR)
	Validity	2021-22 to 2024-25
Additional information (if any)	<p>Mining Plan along with Progressive Mine Closure Plan was Approved by IBM, Bhubaneswar vide letter no. MP/A/14-ORI/BHU/2020-21/994, dated 08.09.2020.</p> <p>Modification of Mining Plan along with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines (IBM), Bhubaneswar vide Letter No. MPM/A/08-ORI/BHU/2021-22/742, dated 05.08.2021 for Iron & Manganese Ore over an area of 347.008 Ha (As per DGPS)/ 349.254 Ha (as per ROR) for the period 2021-22 to 2024-25 in favor of JSW Steel Ltd.</p>	
Mining Parameters	Quantitative Description	
Method of Mining	Opencast Fully Mechanized Method with Crushing, Screening, CPU and Beneficiation Plant (Proposed)	
Drilling/Blasting	Parameter	Description
	Bench Height	9m for Iron Ore Zone 6m for Manganese Ore Zone
	Bench Width	23m for Iron Ore Zone 15m for Manganese Ore Zone
	Depth of Blast hole	9.9m for Iron Ore Zone 6.1m for Manganese Ore Zone
	Burden	3m for Iron Ore Zone 2m for Manganese Ore Zone
	Spacing	4m for Iron Ore Zone 2.5m for Manganese Ore Zone
	Hole diameter	150/115mm for Iron Ore Zone 32mm for Manganese Ore Zone
	Powder Factor	7 Tonne/Kg

Geological Reserves	181.036 Million Tonnes Iron ore and 0.538 Million Tonnes Manganese Ore
Mineable Reserves	164.79 Million Tonnes Iron ore and 0.508 Million Tonnes Manganese Ore
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/Waste, MTPA)	Iron Ore (ROM: 10 Million TPA & OB: 4.216 Million TPA), Total Excavation: 14.216 Million TPA and Manganese Ore (ROM: 0.036 MTPA & OB: 0.223 MTPA), Total Excavation: 0.259 Million TPA
Life of mine	17 years for Iron Ore and 14 Years for Manganese Ore.
Mine Bench Height & Bench Width	Bench Height: 9m (Iron Ore Zone); 6m (Manganese Ore Zone) Bench Width: 10-12m (Iron Ore Zone); 15m (Manganese Ore Zone)
No. of Mine Benches	9 Nos. in Quarry-3/4 12 Nos. in RF Pit 6 Nos. in Mn Quarry-5
Existing Depth, m bgl	The existing bottom RL in: 507 m
Ultimate Depth of Mining, m bgl	405 m
Ground Water Table, m bgl	Likely depth of water table is of 5 m (at RL545 m) general surface level (at RL550 m) in rainy season and 8m (at RL542 m) in dry season. Mn Quarry-5 has touched the ground water at 540m RL.
Details of ground water intersection	Yes (Mn Quarry-5 has touched the ground water at 540m RL)
Individual bench slope	450 OB 850 Quarry-3/4, RF Pit and Mn Quarry-5
Overall pit slope	37.50 for Iron Ore zone and 310 for Manganese Ore zone
Details of existing/proposed Crusher	Existing: Stationary crushing & screening plant: 1 x 350 TPH, Mobile crushing & screening plant: 1 x 150 TPH & 1 x 100 TPH, Mobile screening plant: 3 x 200 TPH, 4 x 150 TPH, 2 x 100 TPH, Mobile revolving screening plants- 1 x 10 TPH Proposed: Mobile Crushing & Screening Plant: (400 TPH x 10 & 250 TPH x 07), initially & same will be phased out after Central Processing Unit (CPU): 2000 TPH is commissioned
Mineral Beneficiation	Proposed: 6.0 Million TPA Grinding & Beneficiation Plant
RoM output size	- 10 mm Iron Ore

	+10-75 mm (58%) and + 6-10 mm (42%) Manganese ore
Transportation details including capacity of dumper/tipper, mode of transport and distance	Dumpers are being/will be used for ore transportation from mine to ore processing area, waste transportation to dump area and processed ore transportation from ore processing area to stacking yard. Initially the iron ore will be sent to JSW plants and other end users through Road/ Railway/ Sea-ways. After commissioning of Grinding & Beneficiation Plant, it will be processed and transported through slurry Pipeline/ Road/ Railway/ Pipe Conveyor.
Generation of Topsoil/OB & its Management during plan period & conceptual period	<p>There is no top soil cover in the Iron Ore mineable area. The top soil cover from the Mn working quarry will be scrapped and stacked at the earmarked site. Total waste generation during plan period from the iron ore zone will be 64, 81,289 cum and 4, 41,971 cum from manganese ore zone. At conceptual stage from the Iron, ore zone will be 34, 20,341 cum and 7, 80,834 cum from manganese ore zone.</p> <p>OB is being & will be used for the backfilling of excavated area.</p>
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	<p>Iron ore with <45% Fe (laterite, shale, BHJ/BHQ) and manganese ore processing generate significant waste, including 30% from beneficiation, 78% intercalated waste, and 10% Mineral Rejects, temporarily stored for future use.</p> <p>During Plan period from Iron ore zone; 85, 00,000 cum and from Mn ore 14,400 cum Mineral Reject will be generated.</p> <p>At conceptual stage, from Iron ore zone: 1, 38, 04,020 cum and from Mn ore 1, 00,107 cum Mineral Reject will be generated.</p>

vii. Water requirement

Total water requirement	13,632 m3/day	Fresh water	980 KLD (GW) + 1102 KLD (Dewatering)+ 11550 KLD (SW)
		Treated water (Domestic)	70 KLD (treated through STP capacity 80 KLD)

Source	Surface water, ground water sources, rain water harvesting pond, borewell and from manganese pit
Permission for withdrawal/intersection along with details of grant and its validity	<p>Renewal of NOC from CGWA for Ground water withdrawal (980KLD) & for dewatering (1102KLD) was obtained, vide NOC No. CGWA/NOC/MIN/REN/2/2024 /10057 was obtained dated 17.10.2024 and valid till 18.01.2026.</p> <p>Permission regarding surface water withdrawal for 4,000 m³/hr (96,000 m³/day) has been obtained by the Department of Water Resources, Odisha dated 28.11.2023.</p>
Additional information (if any)	Total water requirement will be 553cum/hr for beneficiation/ Grinding & Slurry Pumping. Further, for domestic consumption it has been planned to utilise ~15 cum/hr of water. Therefore, total water requirement will be 568m ³ /hr (13,632 m ³ /day) and will be met from surface water, ground water sources, rainwater-harvesting pond, borewell and from manganese pit.

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

Particular	Particular's Name	Distance &Directions
Village	Village Kashira	~0.3 km in East Direction
Town/City	Barbil	~26 km in NE direction
Highway	NH-215 (Earlier known as NH-520)	Passing through ML Area
Interstate Boundary	Odisha – Jharkhand	~ 8.9 km in North direction
Railway Station/ Railway line	Barsuan	~15.2 km in SW direction
Water Bodies	Karo Nadi	Adjacent in NW direction and at some places overlapped to mine lease
	Suna Nadi	~6.7 km in East direction
	Orahari Nallah	Adjacent to ML boundary in SW direction
	Kashira Nallah	Flowing through ML Area
	Narayanposhi Nallah	Flowing through ML Area
	Samij Nallah	~3.8 km in NW direction
	Kalta Nallah	~4.0 km in NNW direction
	Teherei Nallah	~5.7 km in ESE direction
	Kalmang Nallah	~6.3 km in ENE direction
	Erua Nallah	~6.7 km in WNW direction
	Gera Nallah	~7.8 km in West direction

	Topadihi Nallah	~8.0 km in NE direction
	Khajurdihi Nallah	~8.0 km in SE direction
	Geria Nallah	~8.8 km in WSW direction
Forest	No Protected Forest within 10km radius.	
	Kathamala RF	within ML area
	Mendhamaruni RF	~1.0 km in East direction
	Karo RF	~1.3 km in North direction
	Tortha RF	~1.5 km in NW direction
	Reserved Forest	~2.8 km in South direction
	Sarakanda RF	~5.0 km in South direction
	Uliburu RF	~6.4 km in North direction
	Khajurdihi RF	~7.2 km in SSE direction
	Tholkabad RF	~7.8 km in North direction
	Karampada RF	~8.7 km in North direction
	Lakrghat RF	~8.7 km in NE direction
	Siddhamath RF	~9.3 km in ENE direction

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 Letter 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 (Stage-II) for diversion of 244.327 ha including 184.591 ha of virgin land vide letter no. F. No.8-34/2000-FC (Vol-I) dated 15.11.2007 and vested to JSW FC (Stage II) transferred to JSW for 238.201 ha forestland vide No. FE-DIV-FLD-0067-2022-17050/FE&CC, dated 22.09.2022 Application for diversion of balance forest land i.e. 19.256 ha (including 1.014 ha safety zone) has been submitted vide Letter No. JSW/S/CO/2023/615, dated 27.09.2023. NPV Amount of Rs. 19,30,88,250/- was submitted to the DFO by JSW Steel Ltd. Ex lessee paid Rs. 18,39,40,850/- as NPV. Total NPV paid = 37,70,29,100 /- (NPV has been paid for entire forest land by JSW) on 10.06.2020
National Park	No	Karo – Karampada Elephant Corridor (~7.7 Km from the Mine lease area in North direction)
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	

Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	-
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (Nos. and name of schedule-I species with authenticated letter)	Yes	Total 3 species i.e. Elephas maximas (Indian Elephant), Melursus ursinus (Sloth Bear) and Python molurus (Indian Python) of Schedule I according to (IWPA) Indian Wildlife Protection Act' 1972 was recorded in the study area during field survey.
Wildlife Conservation Plan	Yes	Site-specific Wildlife Conservation Plan for 03 Schedule-I Species i.e. Elephant, Sloth Bear & Indian Python has been approved from PCCF & CWW vide letter no. 988/CWLW-FDWC-FD-0126/2021, dated 31.01.2022. Budget proposed for conservation of the same is Rs. 746.173 Lakh. PP has submitted Revised budget is Rs 1028.2771 Lakh vide letter dated 11.04.2025 approved from Divisional Officer Forest, Bonai Division.

x. Green belt/plantation details:

Proposed area for green belt/ plantation and no. of saplings proposed	At conceptual stage, greenbelt/plantation will be carried out on 317.215 ha area. Nos. of saplings at conceptual stage 793038 @ 2500/ha
Budget for green plant & plantation till the end of life of mine.	Rs. 15.86 Crore
Budget for nursery	Rs. 30.82 Lakh
Details of existing plantation and its survival rate	At present, 32.17 ha area had been covered under the greenbelt/plantation with 80425 nos. of saplings Survival Rate 90%.
No. of tree cuts in the mine lease area and compensatory afforestation	NA
Particulars for Green belt/plantation	Area covered (In Ha)

7.5 m barrier & non-mineralized zone	40.611
50 m safety zone of nallah, roads, electric lines	
500 m safety zones of nearest habitation villages	-

xi. 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 Season
Predominant Wind direction (From)	North West
Ambient Air Quality (no. of locations) and results	10
Noise level (no. of locations) and results	10
Water Quality (no. of locations) and results	Ground water: 08
	Surface water: 07
Soil Quality (no. of locations) and results	08
Hydro geological study and results	Detailed hydrogeology study has been carried out by Geo Climate Risk Solutions Pvt. Ltd. in June, 2023.

xii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	National Level/Local Level: "The Times of India" & "The Dharitri" on 21.04.2022
Date of PH	23.05.2022 at 10:00 AM
Venue	Open field in front of proposed Indoor Stadium, Dhublameda village under Koira Block in the District of Sundargarh.
Chaired by	Dr. Binod Bihari Dash, Regional Officer, SPCB Rourkela. Shri Shiv Shankar Toppo, Additional District Magistrate, Sundargarh

Main issues raised during PH	Employment, Drinking Water Facility, Infrastructure, Education, Pollution, Plantation, Nearby Development, Medical Facilities etc.
Budget proposed for addressing issues raised during PH over 3 years	610 lakhs

- 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	Vide letter no. 536/IND-II-CTE 6207, dated 14.01.2019		
Consent to Operate	Vide letter no. 4651/IND-I-CON-2258, Consent Order No. 2944, dated 30.03.2024 & same is valid up to 31.03.2026		
Certified Compliance Report and Inspection date	Certified Compliance Report vide file no. 101-1040/18/EPE, dated 19.09.2024. Action Taken Report for partially complied conditions has been submitted to Regional Office, MoEF&CC, Bhubaneswar on 24.09.2024. Date of Inspection: 30.08.2024		
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	Period	Production in Tonnes	
		Iron Ore	Mn Ore
	2020-2021	4476524	496.518
	2021-2022	5443454	4752.28
	2022-2023	5296717	5191.404
	2023-2024	5627775	554.00

- xiv. Rehabilitation & Resettlement (R&R):

R & R details	This is an existing mine and expansion will be carried out within exiting mine premises.
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- xv. Court case details:

Court Case, No and its present status	<p>A court case is pending against the Project at Odisha High Court with order no. WP (C) 24918/2020 regarding the refund of excess stamp duty paid during the time of registration of lease deed.</p> <p>As per the judgement of Hon'ble High court of Odisha dated 09.11.2020, it mention that: "The impunged levy of differential stamp duty paid by the petitioner-company on its mining lease deeds pursuant to demands dated 26.06.2020 shall be subject to final outcome of the writ petition".</p>
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Undertaking by Project Proponent w.r.t court case	Project Proponent has submitted an undertaking with regards to the court cases.
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xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP has submitted the an undertaking by way of notarized affidavit bearing no P072261 dated 15.04.2024 stating that the proposal does not involve violation of Ministry's OM dated 30.05.2018.
Undertaking by Project Proponent in EIA/EMP report	An Undertaking has been submitted along with EIA-EMP report.
Undertaking by Consultant in EIA/EMP report	Consultant has submitted the undertaking vide letter dated 21.06.2024 for the EIA/EMP report.
Plagiarism Certificate	PP has submitted the certificated dated 21.06.2024.

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

Activities	Capital cost (Crores)	Recurring cost (Lakhs/annum)
Air, Noise, Water, Greenbelt/ Plantation etc.	Rs. 33.91/- crore including Rs. 7.46 Crore for Wildlife Conservation Plan	4.52 Crore

xviii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public Hearing)	Capital cost for EMP is Rs. 33.91 Crore including Rs. 7.46 Crore for Wildlife Conservation Plan and Budget proposed for addressing the issues raised during the Public Hearing: Capital Cost: Rs. 610 Lakh
Project Cost	Total cost of the project is Rs. 960 Crores
Employment (Nos)	Existing: 500, Additional: 452 & Total: 952

xix. Essential details were sought on 25.06.2024 & following reply was submitted on 09.08.2024:

S. No.	EDS Point	Reply by Project Proponent
1.	The Project Proponent needs to submit the latest Certified Compliance Report (not a year older from the date of inspection) by the Ministry's Regional Office.	The project was monitored by the Regional Office of MoEF&CC at Bhubaneswar on 06.02.2023 and 07.02.2023 in line with the Certified Compliance Report for the expansion project. Based on the site inspection, a monitoring report was issued and ATR was sought by the IRO Bhubaneswar with some observations. The ATR submitted by JSW has undergone the due process of review, perusal and in turn certain clarifications were asked by the MoEFCC, New Delhi.

		<p>In view of the above, it is evident that IRO Bhubaneswar, post its inspection has constantly reviewed and perused the compliance status through evidential documents and site photographs. The last review of the compliance by IRO Bhubaneswar office was on 13.02.2024. Further, Jt. Secretary- MoEF&CC perused the compliance through personal hearing on dated 25.04.2024 and based on the deliberations and conclusions, JSW submitted required documents as concluding act.</p> <p>It is also submitted that on receipt of the cited observation through EDS as referred, clarifications explaining the case and request for perusal was made vide our letter dated 10.07.2024.</p> <p>The duration of this entire process should be exempted from the one-year time period from the date of site inspection, as stipulated in paragraph (iii) of part B of the OM dated 08.06.2024.</p>
Essential details were sought on 23.09.2024 & Reply was submitted on 24.09.2024.		
1.	Submission of Certified Compliance Report	Certified Compliance Report vide file no. 101-1040/18/EPE, dated 19.09.2024. Action Taken Report for partially complied conditions has been submitted to Regional Office, MoEF&CC, Bhubaneswar on 24.09.2024.

xx. Additional details were sought on 20.11.2024 & following point-wise reply was submitted on 27.11.2024:

Point 1	The Project Proponent (PP) needs to submit a protection plan for villages and schools located within or adjacent to the ML area, ensuring their safety from any mining related activities.										
Reply	<p>The nearby habitation of the Villages within 500 m from the ML boundary are the following: Village Orhauri, Harishchandrapur, Kusumidihi, Renglabeda and Segasahi.</p> <p>Habitation details nearby the ML Area</p> <table> <tr> <th>S. No.</th><th>Villages</th><th>Distance & Direction from ML Boundary</th><th>Distance & Direction from UPL</th></tr> <tr> <td>1</td><td>Harischandrapur</td><td>~90 m in SW direction</td><td>~100 m form Manganese quarry and ~700 m from Iron Quarry in WSW direction</td></tr> </table>			S. No.	Villages	Distance & Direction from ML Boundary	Distance & Direction from UPL	1	Harischandrapur	~90 m in SW direction	~100 m form Manganese quarry and ~700 m from Iron Quarry in WSW direction
S. No.	Villages	Distance & Direction from ML Boundary	Distance & Direction from UPL								
1	Harischandrapur	~90 m in SW direction	~100 m form Manganese quarry and ~700 m from Iron Quarry in WSW direction								

2	Rengalbeda	~110 m in NNE direction	~2.6 km from Mn quarry in NNE direction and ~270 m from Fe quarry in NW direction
3	Segasahi	~160m in ENE direction	~1.8 km from Mn quarry in ENE direction and ~181 m from Fe quarry in East direction
4	Kusumdihi	~200 m in NNW direction	~1.5 km from Mn quarry in North direction and ~500 m from the Fe quarry in NNW direction
5	Orhuri	~220 m in SSW direction	~400 m from Mn quarry in SSW direction and ~680m from Fe Quarry SW direction

There is 1 school within mine lease and 2 schools are located within 500 m from the ML boundary.

No.	Particular	Details		
.	Name of Village	Kashira	Harishchandrapur	Kusumdihi
.	Name of School	Govt PS Narayanposhi	Govt. UPS Orahuri	Odisha Adarsha Vidyalaya
.	Distance from Mine boundary	Within ML	200 m	350 m
.	Distance from UPL	80 m	360 m	540 m

Protection Plan and safety measures for Villages and School:

- As per the micro-meteorological data, pre-dominant wind direction was observed from NW. Habitation of Village Harishchandrapur is located at ~90m distance in SW direction from ML boundary.
- Schools and Habitation of any Village will not be disturbed at any stage of mining.
- Mining is being/will be carried out as per the provisions outlined in Mining Plan Approved by Indian Bureau of Mines as well as by abiding to the guidelines of Director General Mines Safety (DGMS) and Conditions mentioned in DGMS guidelines will be followed strictly.
- Controlled blasting is being/will be adopted and optimum use of explosive energy is being/will be made by optimizing explosive charge per hole and per delay.
- NONEL and bottom hole initiation system is being/will be used to control ground vibrations, noise & fly rocks.
- Provision of monitoring of each blast is being/ will be made so that the impact of blasting on nearby habitation & dwelling units and schools is ascertained.

- The blasting is being done in such a way that no damage is caused to residential houses.
- Controlled blasting is being/will be carried out to reduce air blast and peak particle velocity in order to control effect of vibration in the nearby habitation and school.
- The drilling, charging, stemming and blasting operations are being/will be carried out under direct personal supervision of Manager/Asst. Manager. He maintains the records of blasting parameters for every blast.
- Main haulage road in the mine is being/shall be provided with permanent water sprinklers and other roads are being/ shall be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points are being/ shall invariably be provided with bag filters or dry fogging system.
- All measures are being/will be adopted to control fugitive dust emission during mining operation and to ensure no impact on nearby habitats and schools.
- For conducting blasting for mining operations, proper vibration studies are being/shall be carried out well before approaching such habitats or other buildings to evaluate the zone of influence and impact of blasting on the neighbourhood. Blasting is being/will be done within the permissible distance from habitation as permitted by DGMS.
- No mining operations are being /will be carried out within 50 meters of public works such as public roads and buildings or inhabited sites.
- A bund will be made around the habitation area.
- People will be notified in advance when noisy work is to be done to limit their exposure, further sign-post also will be for noisy areas.
- The ambient Air Quality Monitoring is being/will be done in the core as well as buffer zone of the ML area. There are 03 nos. of online CAAQMS and 4 nos. of manual monitoring stations located in the buffer zone. Records of the monitoring are being maintained properly.
- Beneficiation Plant for Mineral Processing will be based on latest technology comprising Drum scrubbers, double deck wet screens, jigs, dewatering screens, thickening cyclones, Thickener, Filter press, Hence, no major impact on air quality will arise due to processing plant.
- A thick plantation is being proposed in over the bund and Village safety zone to control dust emissions and noise.
- Green belt along the 7.5m mine lease periphery and plantation on dump and along the nallah is being/ will be carried out.
- Plantation around schools and residential areas will be carried out.
- Regular monitoring of air and noise levels at the project boundary and nearby sensitive locations.
- Appropriate protective measures are/will be implemented based on the monitoring results.
- Ensuring compliance with permissible standards set by regulatory authorities.

	This detailed plan will be ensuring the safety and well-being of Villages and schools near the mining area.
Point 2	PP is required to submit a comprehensive protection plan for the rivers and nallahs flowing within or adjacent to the ML area to prevent contamination and environmental degradation.
Reply	<p>Two seasonal nallahs viz. Narayanposhi and Kasira Nallah are flowing within the lease area which divide the whole lease into three parts from NE to SW. River Karo is flowing due North close to the Western boundary outside the lease area which constitutes the principal drainage system of the locality and collects surface run-off water through the seasonal nallahs.</p> <p>No waste water is being discharged due to mining activities. Also, the beneficiation process will not use any chemicals and hence there is no likelihood of any chemical contamination of water bodies due to the mining activities; Following protective measures are/will be adopted to control the surface run-off:</p> <ul style="list-style-type: none"> ➤ River & nallah will not be disturbed due to mining. Mining will be carried out at 50m away from the river and nallah. ➤ During monsoon, mine wash-off from pits are being/will be arrested by series of check dams proposed on the downstream side and silt settling ponds constructed at the lowest bench of the mine. ➤ The check dams & check bunds are being/ will be de-silted well before monsoon season every year to ensure clear water to overflow. The de-silted material is stacked separately. ➤ Guard walls and coco fibre fence have been made along the nala. Besides this, plantation has been carried out along the sides of nala. ➤ Retaining wall & garland drains are constructed around the dumps & at strategic points of quarries. ➤ The surface run-off from the external OB dumps is guided through sedimentation ponds and garland drains to the surface water course. It will prevent eroded material from reaching the main drainage/water course of the region. ➤ Regular monitoring of surface water quality is being/will be carried out. <p>Therefore, it can be concluded that major part of the surface runoff from working areas is being channelized to in pit settling cum percolation ponds located at various strategic locations. The rest part is channelized through garland drain to percolation cum settling pits and check dams.</p> <p>Various protective measures viz. retaining walls, garland drains and settling cum percolation pond around the toe of dumps, blue dust stock yard, mineral reject stock, Top Soil stack, around RF area and NH-215; Check dams around Nallahs and dumps have been constructed to prevent pollution of nalas present within the lease and water bodies nearby to the mine site.</p>
Point 3	PP must engage a reputed national institute to conduct blasting/vibration studies, including fly rock distances and air overpressure. Furthermore, PP should submit a mitigative plan to ensure the smooth passage of vehicles during blasting activities.

Repl
y

The Department of Mining Engineering at the National Institute of Technology, Rourkela conducted a scientific study on blast-induced ground vibration and submitted the report in June 2024. Copy of the same is submitted along with ADS Reply.

Study on Air Over Pressure:

Based on the study as mentioned in para 5.2 therein, AOP observed ranges between 94.04 dB and 136.54 dB. The measured air overpressure was plotted against cube root scaled distance [SD]. Relation between the cube root of scaled distance and sound pressure was studied and a governing relation is determined as:

$$AOP = -0.0703 (D / Q^{1/3}) + 114.61$$

Where, AOP = Air Over Pressure (dB); D = Radial distance (m), and Q = Maximum charge per delay /kg

There exists a report that suggests the different noise levels and their possible consequences.

Noise level and its possible effect (Heck, 2014)

S.N.	AOP (dB)	Description
1	115	Threshold of complaints
2	134	US Bureau of mines recommended safe level of blasting
3	140	Historical Proven safe level
4	151	Occasional windows break
5	171	General windows break
6	180	Possible structure damage

The above table shows that the sound level produced by blasting operations is within safe limits and would not affect human being adversely.

Study on Fly Rocks

In the trial blast carried out by the mines (mentioned at Para 5.5 and 5.6 of study report), it was observed that, the maximum distance travelled by those flying rocks of about 5.00 cm sizes were about 20 to 60 m from the blast patches. Those would not cause any harm as the area was secured during blasting operations.

The mines have also implemented the technique of muffle blasting to reduce the scattering of fly rock further, as below.

In the Narayanposhi mine, the mines used metal wire mess with dimensions 1.8m x 1.2m and a mess aperture of 10mm as well as tin sheets of dimensions 6m x 4m to cover the blast holes. The positions of these sheets were secured with one or two bags filled with locally available fines weighing over 35 to 50 kgs each.

Mitigative Plan for Highway Commuters

➤ The blasting activity at present is concentrated in the area which is 300m away from the National highway.

	<ul style="list-style-type: none">➤ Keeping in view the advancement of mining faces towards National highway, PP has applied for obtaining controlled blasting permission from DGMS vide application No- JSW/NP/ DGMS/ BBSR-II/0353/ 24-25, 10.09.2024.➤ All the blasting operations upon advancing closer than 300m from National Highway shall be carried out in accordance with the recommendation of scientific study and provisions of permission as would be granted by DGMS.➤ Additionally, a SOP is formulated and same is submitted along with ADS Reply, wherein at S. No. 6.11 it is envisaged to halt traffic before the firing, in consultation with NHAI by erecting suitable barriers and posting of security to ensure safety of commuters.				
Point 4	PP is required to submit an action plan for the transportation of ore, in line with the NEERI recommendations, until the slurry pipeline is commissioned.				
Reply	<p>At present, Narayanposhi Iron and Manganese Ore Mine has dispatched 5.54 Million TPA ore and the same was dispatched through rail/road/ ship mode.</p> <p>Compliance to NEERI conditions and improvement in infrastructure since 2018:</p> <p><u>1. Development of Road Network:</u></p> <p>NH-215 is passing through the lease area which is widened and made four lanes, is the main connecting road to all the railway sidings. In addition to this, other branch roads of Barbil & Joda sector connected to NH from railway siding is widened and concreted. These roads are also provided with paved shoulders, proper drainage system and green belt.</p> <p>Regular vacuum cleaning of all mineral carrying roads is done by road sweeping machine deployed by mines and also by Govt. agencies.</p> <p>Besides this, cement concrete road has been constructed from mine entrance/exit to the NH and wheel washing system is installed in the exit gate.</p> <p><u>2. Other measures to control dust:</u></p> <p>Iron Ore from mine are transported through tarpaulin covered trucks up to the nearest railway siding and port from where it is transported to user destination by railway wagons and ships respectively. The trucks are regularly monitored for the emission of the vehicle (PUC) to ascertain emission limits as per the pollution norms.</p> <p>Besides the existing iron ore transportation, additional 4 MTPA iron ore is proposed to be dispatched with available logistic infrastructures and following tentative incremental quantity by railway sidings is envisaged.</p>				
	Narayanposhi	Rail	MTPA	No of trucks/ day	To & Fro
	Towards Railway Siding 4 MTPA	Jaroli	0.64	97	194
		Banspani	0.68	103	206
		BIL/ RMJC	1.00	151	302
		Rakshi	0.56	85	170
		Bimalgarh	0.48	73	145
		Rengra	0.36	55	109
		Barsuan	0.28	42	85

	No of working days considered: 330 days, Weight of Truck considered: 20 Tonne		
	For the incremental handling requirement and to supplement the existing capability of railways we have contributed 25 rakes to the existing rolling stocks under GPWIS and will add further as per need.		
Point 5	PP needs to revise its proposed water requirements, taking into account current local consumption and future water needs. PP needs to improve upon technology to reduce water consumption during processing of iron ore. PP needs to develop methodology to recycle maximum water.		
Reply	The requirement of makeup water for beneficiation and slurry pumping earlier was planned for @553 m ³ /hr. Further technological development will be introduced and reduction in requirement of make-up water is aimed as @539 m ³ /hr (a saving of 14 m ³ /hr). The details are as narrated below: -		
	Activity	Water Requirement (m ³ /hr)	Water Requirement m ³ /Day
	Beneficiation & slurry pumping	539	12, 936
	Mining and Allied Activities	15	360
	Total	554	13, 296
	Source		
	2082 m ³ /Day- Ground Water & Dewatering water		
	11, 214 m ³ /Day - Surface water		
	Description	m ³ /Hr	m ³ /Day
	Water Addition in Plant	3673	88, 152
	Water recovery & recycle to plant	3134	75, 216
	Water lost in tailing, production and evaporation losses	539	12, 936
	Make-up water to plant	539	12, 936
	Improvement:		
	a. It is discussed with our consultant M/s. MECON that for reducing evaporation loss, the depth of water reservoir would be reduced by 1 m So that Surface area can be minimized. The evaporation loss would be reduced from 39m ³ /hr to around 30 m ³ /hr.		
	b. All drainage would be made with coverings and would be channelized to main reservoir for re-use of water.		
	c. Big size of filters with polypropylene filter cloths would be used for minimizing the moisture carrying by tailings. With this technological change moisture in tailing could be reduced to 20% as against the planned 23%. This will help reduce the water loss to 28m ³ /hr from 33m ³ /hr.		
	d. The mine site has three recharge ponds with 5779.5 m ³ capacity for pond 1, 2478.7 m ³ capacity for pond 2 and 6789.7 m ³ for pond 3, making it total		

	<p>15,047.99 m³. Average annual rainfall is taken as 1300mm. Presuming that number of fillings will be 3 times in a year thus taking no. of days water available in water conservation structures is 120 days So, total estimated recharge from three ponds 81,258.5 m³ /year.</p> <p>e. Waste water generated from workshop is being treated using oil–water separator and treated water is being used in dust suppression & vehicle washing.</p> <p>f. Sewage waste generated from canteen, mine office & toilets is being disposed in soak pit via septic tank.</p> <p>g. Use of wetting agents is recommended to reduce water consumption.</p> <p>h. Re-use of water recovered from processing plant.</p> <p>i. Rain water harvesting from roof tops of buildings and other super structures for storage. The roof top rain water is collected and channelized to the recharge well in the camp area.</p> <p>j. Suitable storm water drainage system along the roads is provided to dispose storm water effectively. The surface run-off collected in the storm water drains is channelized through a series of settling-cum-percolation ponds before discharged.</p> <p>k. Staggered trenches of 2m x 1m dimension are proposed to be constructed along the contours so that during sudden storm, good amount of run-off can be harvested which will maintain a good amount of soil moisture content.</p> <p>l. For effective harvesting of rain water from the valley in the northern part of the lease area, a recharge tank with overflow system is already provided.</p>								
Point 6	PP is required to submit an action plan to reduce diesel consumption, increase renewable energy use, and adopt electric vehicles within the ML area to align with sustainable practices.								
Reply	<p><u>1. Action Plan to Reduce Diesel Consumption</u></p> <p>➤ Total Diesel Consumption per tonne of Iron ore for FY 2023-24:</p> <table border="1"> <tr> <th>Activity</th><th>Specific Diesel Consumption (Litres per tonne of iron ore)</th></tr> <tr> <td>Mining Excavation</td><td>0.68</td></tr> <tr> <td>Mineral Processing and Dispatch</td><td>0.67</td></tr> <tr> <td>Total Diesel consumption</td><td>1.35</td></tr> </table> <p>➤ It is proposed to construct a Crushing and Screening Plant of 2000 tph, which would be electrically operated. This will reduce the specific diesel consumption from 1.35 litres per tonne to 0.68 litre per tonne only, amounting to reduction of 6700 kilo litres per annum corresponding to 10 million tonne of iron ore production.</p> <p><u>2. Increasing Use of Renewable Energy</u></p> <p>➤ At present 50 KW of solar power system is installed an additional 50 KW installation is planned for completion by the end of this financial year.</p> <p>➤ 3 km of solar fencing has been installed to protect wildlife and reduce human-wildlife interactions.</p>	Activity	Specific Diesel Consumption (Litres per tonne of iron ore)	Mining Excavation	0.68	Mineral Processing and Dispatch	0.67	Total Diesel consumption	1.35
Activity	Specific Diesel Consumption (Litres per tonne of iron ore)								
Mining Excavation	0.68								
Mineral Processing and Dispatch	0.67								
Total Diesel consumption	1.35								

	<ul style="list-style-type: none">➤ In the Buffer Zone, 22 solar-powered borewells (equipped with overhead tanks, standposts, solar panels, and pipelines) have been installed, along with 50 solar streetlights in nearby communities, encouraging the use of clean energy. <p>3. Adoption of Electric Vehicles within the Mining Lease</p> <ul style="list-style-type: none">➤ JSW Steel is a founding member of the EV100+ initiative, an international movement aimed at phasing out heavy, polluting vehicles.➤ Feasibility studies are underway to evaluate the suitability of electric trucks and loaders in JSW mines at Odisha in collaboration with M/s Propell Motor and M/s Sany India limited.➤ Possibility will be explored for deployment of electric operated heavy mining vehicles.																		
Point 7	PP needs to obtain a certificate from the Department of Mines and Geology (DMG) confirming that no mining activity has been undertaken at the ML boundary (Safety Zone) on the northern side.																		
Reply	A Certificate from the Department of Mines and Geology (DMG) stating that no mining activity has been undertaken at the ML boundary (Safety Zone) on the northern side. Copy of the same is submitted along with ADS Reply.																		
Point 8	PP must submit a copy of the Stage-I Forest Clearance (FC) for 19.256 ha of forest land, along with the transfer of Stage-II Forest Clearance for 238.201 ha of forest land in its name.																		
Reply	<ul style="list-style-type: none">➤ M/s AMTC the erstwhile lessee has obtained forest clearance over the entire forest area falling within the mining lease, barring 14.864 Ha as safety zone & Greenbelt, as per extant rule vide F.No. 8-34/2000-FC (Vol.-I) dated 15th Nov 2007.➤ In 2020, upon getting the mining lease through auction process JSW got vested with the Forest Clearance which was granted to erstwhile lessee.➤ Pursuant to amendment in MMDR and guideline issued by MOEF &CC transfer of Forest clearance vide No. FE-DIV-FLD-0067-2022-17050/FE&CC, dated 22.09.22 is made in the name of JSW over area of 238.201Ha➤ NPV has been paid for the entire forest area and CA land also has been provided for the total forest area within the lease. Details of NPV and CA land is given below. <table><tr><td>NPV Paid by</td><td>In Rs.</td></tr><tr><td>By Ex-Lessee</td><td>18, 39, 40, 850/-</td></tr><tr><td>By JSW</td><td>19,30,88,250/- (over entire forest land @ 7.5 lakhs/Ha)</td></tr><tr><td>Total NPV</td><td>37, 70, 29, 100/-</td></tr></table> <table><tr><th colspan="5">CA LAND STATUS OF NARAYANPOSHI</th></tr><tr><th>S.N.</th><th>Pattern</th><th>Area (Ha)</th><th>Date</th><th>Location</th></tr></table>	NPV Paid by	In Rs.	By Ex-Lessee	18, 39, 40, 850/-	By JSW	19,30,88,250/- (over entire forest land @ 7.5 lakhs/Ha)	Total NPV	37, 70, 29, 100/-	CA LAND STATUS OF NARAYANPOSHI					S.N.	Pattern	Area (Ha)	Date	Location
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CA LAND STATUS OF NARAYANPOSHI																			
S.N.	Pattern	Area (Ha)	Date	Location															

	1	CA land provided by Ex-Lessee (virgin forest area)	184.591	20.08.2009	Village Kusumtola of Banki range under Bonai Forest Division
	2	CA land provided by JSW (Pre-80 broken)	53.61	29.05.2023	Village Phulabadi of BJP range under Keonjhar Division
	3	CA land provided by JSW (fresh diversion)	20.00	14.03.2023	Village Lephripada of Lephripada range under Sundergarh Division
	<p>➤ On account of DGPS survey and georeferencing of village sheet some differences are noticed and accordingly 19.256 Ha of forest area needed Forest Clearance. For which our FC application is with state govt for further processing.</p> <p>➤ Further, it is to submit that no mining activity is planned in the un-diverted area of 19.256 Ha, which is also shown in then Mining plan for 2025-30. The same is verified and scrutinized by the RCOM, Bhubaneswar.</p>				
Point 9	PP is required to submit the status of Scheduled Tribe (ST) land within the ML area, detailing any specific considerations or approvals needed.				
Reply	<p>Lease of Narayanposhi Iron & Mn Mines is executed over an area of 349.254 Ha (as per RoR). Surface right over an area of 324.800 Ha was granted to the ex-lessee and has been vested to JSW Steel vide vesting order 15.02.2024. We are yet to obtain the surface right over the balance area of 24.643Ha as shown in the enclosed map. Out of such 24.643Ha, an area of 13.357 Ha is designated as ST land. The said ST land is in the possession of their owners. The conceptual mining plan highlighted in green and yellow (earmarked as M1, M2, M3) is situated on the southern side of highway. The ST land in the rectangle ABCD shown in the map is highlighted in blue colour. It is evident that we have no working plan in this area and hence there in no plan to acquire the ST land.</p>				

xxi. Additional details were sought on 11.12.2024 & following point-wise reply was submitted on 13.12.2024.

S. No.	ADS	Reply
1	PP needs to submit a copy of the Stage-I Forest Clearance for 19.256 ha of forest land.	19.256 Ha of forest area is needed for Forest Clearance, which is currently in progress with the State Government. No mining activity is planned in the aforementioned forest area of 19.256 Ha, as shown in the mining plan and mentioned on page no. - 4, 31, and 71 of the approved Mining Plan along with the Progressive Mine Closure Plan (2025-2030) by the Indian Bureau of Mines, Bhubaneshwar, vide letter no. RMP-2309/2024-25-IBM_RO_BBS, dated 06.12.2024. This information

		has also been conveyed to the EAC (NCM) through an email dated 06.12.2024.
2	PP needs to submit software generated Plagiarism certificate.	Copy of the certificate is submitted along with ADS Reply.
3	PP needs to clarify whether Wildlife Conservation Plan has been prepared as per Wildlife Amendment Act 2022 or not.	The Wildlife Conservation Plan was prepared by the DFO and approved by the PCCF & Chief Wildlife Warden, Odisha, vide letter no. 988/CWLW-FDWC-FD-0126/2021, dated 31.01.2022. Following the implementation of the amended Wildlife Conservation Act 2022, we have requested the Forest Department to revisit the SSWLCP, vide letter no. JSW/S/CO/2024/585, dated 10.09.2024. The Forest Department has issued a revised authenticated list of flora and fauna and same is in the process of revising the existing SSWLCP to incorporate the amendments in the WLA. The company shall submit the approved Wildlife Conservation Plan within two months.

xxii. Additional details were sought on 27.02.2025 & following point-wise reply was submitted on 02.03.2025:

S. No.	ADS	Reply
1	<p>Unauthorized construction: JSW Steel Ltd completed construction of a 2000 TPH Central Processing Unit and a 6.0 MTPA Beneficiation Plant within the mining lease area before obtaining EAC recommendations or the mandatory EC. This constitutes gross violations of the EIA Notification, 2006, and the Environment Protection Act, 1986. Satellite images from 2023 and November 2024 clearly show these facilities constructed without prior environmental clearance or Consent to Establish.</p>	<p>The construction of crushing and screening plant is started for sizing of iron ore without any upgradation of quality for which Consent to Establish (CTE) is obtained from SPCB-Odisha vide letter no. 19304/IND-II-CTE-6577 dated 04.12.2021 as per the provision of Air and Water Act. This shall cater the present production capacity of 6 million Tones. It may be noted that the same is not covered by the provisions of EIA Notification, 2006 as clarified in the OM dated 22.09.2008 of MoEFCC.</p> <p>We would like to confirm that no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. MoEFCC may depute any official to check the fact. Additionally, we want to</p>

		add that no procurement orders for beneficiation equipment have been placed to date.
2	<p>Serious environmental hazard: As the mine area is undulating hills with altitudes varying from 545 m to 640 m above MSL, general slope of the area is towards north and National Highway NH215 and Rajamudna-Rimuli road pass through the ML area through the mining lease area. The operation of the said illegal high-capacity beneficiation plant will generate huge quantity tailings whose improper management may lead to slippage to NH- 215.</p>	<p>A suitable location has been identified for establishing the 6.0 MTPA Beneficiation Plant, taking into account all necessary environmental, technical, and regulatory considerations. The tailings as proposed to be generated from beneficiation plant will be in the form of dry filter cake and are proposed to be discarded along with the mine waste.</p> <p>Proposed Tailing Management</p> <ul style="list-style-type: none"> • Tailing cake from the beneficiation plant will be hauled to the backfilled area • Overburden will be progressively dumped over the tailing • Waste management scheme (OB + Tailing) is prepared with a bottom-up approach for dumps creation with filter press material encircled within the host rocks material. This approach can prevent any potential flow of filter press dump material. • The top cover will be reclaimed by plantation. <p>With the above tailing management plan there would not remain any scope of slippage of tailing towards any other public property as the same would be contained within the worked-out mine and would be overlaid by other overburden.</p>
3	<p>Karo river flows adjacent to the ML area in the northwest direction, and in certain sections, overlaps with the ML area. Additionally, the Orahari Nallah runs adjacent to the ML area in the northwest, while the Kashira Nallah and Narayanposhi</p>	<p>Mine working is planned to ensure protection of nallah leaving 50 m stretch all along. Adequate run-off management by check-dam, garland drain, siltation pond etc. to ensure non-entry of silt to water body.</p>

	Nallah traverse through the ML area.	
4	Public Hearing Non-compliance: Public consultations in affected villages were reportedly not conducted as per mandatory requirements. Public hearing in villages of Harishchandrapur, Koira, Kashira, Kusmdihi, and Kathamala RF for construction 2000TPH Central Processing unit and grinding & 6.0MTPA Beneficiation plant has not been conducted. It is again violation E.P Act. and EIA 2006	The public hearing for the project has been conducted in accordance with APPENDIX IV of EIA Notification, 2006 fulfilling all the mandatory requirements. All necessary records and documentation related to the public hearing are available for reference. Public hearing proceeding is attached herewith as Annexure-I for the reference. The Company also would like to inform that public hearing was conducted on 23.05.2022 under the chairmanship of Additional District Magistrate, Sundargarh at Open field in-front of proposed Indoor Stadium, Dhublameda Village under Koira Block in the District of Sundargarh as selected by SPCB, Odisha.
5	Misrepresentation of Facts: As can be inferred from the last EAC meeting the proximity of protected reserves, rivers, and critical water bodies to the mining lease area was not transparently disclosed by the project proponent.	Details of forests, water bodies/ rivers are mentioned in the final EIA report at Table - 3.1 Environmental Settings of the 10 km Study Area at page no. 125-126 and also presented before the hon'ble committee. This information is already been disclosed during different stages of EC process and is available in the public portal for reference.
6	Excessive water withdrawal: The huge water drawl of 11,550cum/day from Baitarani River will severely affect may adversely impact local water availability and when the said river is already stressed due to large-scale mining and only major river in the said mining zone for local inhabitants.	The requirement of drawl of 11, 550 cum/Day from Baitarani River was envisaged, which further was reduced to 11, 214 cum/day. Out of the said requirement 9462 cum/day would be utilized as conveying media for slurry transportation of iron ore in compliance with NEERI recommendations for avoiding the reliance on road transport. It is pertinent to note that out of 9462 cum/day again 9384 cum/day would be recovered at user end (Paradeep) for alternate utilization by the industry.

		Dept. of Water Resources, Govt. of Odisha has allocated 39 cusec of surface water from Kanupur dam of Baitarani River to Narayanposhi and Nuagaon mines of JSW. To meet the requirement of NEERI recommendations, beneficiation and slurry pumping project is proposed to fulfill the SOTM model. There is no significant impact on local habitats and for the water availability.
7	As per vested order issued post auction of the said mine, EC for 6.0 MTPA iron ore production and 2.0 MTPA Beneficiation plant issued to erstwhile lessee AMTC was vested to JSW Steel Ltd. The new lessee JSW Ltd, soon after execution of ML, applied to MOEF&CC, GoI for expansion of iron ore production to 10 MTPA (ROM) of iron ore, 0.036 million TPA of manganese ore (ROM) along with screening, crushing and 6.0 MTPA beneficiation plant in the lease area, and the Expert appraisal committee has approved the ToR in its 31.12.2020. The project proponent had again applied for amendment of ToR and proposal was considered in the 45 th EAC (Non-Coal Mining) meeting held during 24 th , 25 th and 27 th January, 2022. The EAC meeting had noted that project proponent JSW Ltd had not carried out the public hearing.	We would like to clarify that alleged claim stating that The EAC meeting had noted that project proponent JSW Ltd has not carried out the public hearing is a misinterpretation of the facts. The public hearing was conducted as per the mandatory requirements, ensuring transparency and compliance with APPENDIX IV of EIA Notification, 2006 fulfilling all the mandatory requirements after grant of amendment in ToR by the 45 th EAC (NCM) committee held on 22-27 Jan 2022. All relevant stakeholders were given the opportunity to participate, and their concerns were duly recorded and addressed. All necessary records and documentation related to the public hearing are available for reference. Public hearing was conducted on 23.05.2022 under the chairmanship of Additional District Magistrate, Sundargarh at open field in front of proposed Indoor Stadium, Dhublbedha Village under Koira Block in the District of Sundargarh.
8	Instead of complying the approved TOR, preparation of EIA and EMP and public hearing as directed in aforesaid EAC meeting, JSW Steel Ltd started construction of 6 MTPA iron ore beneficiation plant in 2023 and more than 90% of the project	As stated earlier, no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. Even the detailed engineering and procurement of equipment is not yet started.

	has been completed in 2024. These activities are gross violation of E.P. Act.	MOEF May depute any official to check the fact. The above allegation is unfounded.
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- xxiii. Additional details were sought on 19.03.2025 & following point-wise reply was submitted on 04.04.2025:

S. No.	ADS	Reply
1	PP should obtain and submit a report on current status of installation of beneficiation plant in the project after site inspection by MoEFCC Regional Office, Bhubaneswar on 19.03.2025.	Site visit of the IRO was done on 26.03.2025 and based on the observations made during inspection and documents submitted, the status report was prepared and submitted to the MoEF&CC, Vide File No. 101-1040/18/EPA, dated 04.04.2025. Site inspection report along with the status is enclosed with ADS Reply.

- xxiv. Additional details were sought on 08.04.2025 & following point-wise reply was submitted on 17.04.2025:

S. No.	ADS	Reply
1	PP should submit the present status of implementation of revised Wildlife Conservation Plan.	Divisional Forest Officer of Bonai Division, Sundergarh (District) has revised the site-specific Wildlife Conservation Plan with regard to Narayanposhi Iron Ore and manganese Mine of M/s. JSW Steel Ltd. The same is forwarded to PCCF (WL) and Chief Wildlife Warden through RCCF Rourkela for approval. Copy is enclosed with ADS Reply.

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

The EAC deliberated the ADS points related to environmental clearance for Narayanposhi Iron & Manganese Ore mining with enhancement in production capacity of Iron Ore (ROM) from 6 to 10 MTPA & OB 4.216 MTPA with total excavation 14.216MTPA & existing capacity of Manganese Ore (ROM) 0.036MTPA & OB 0.223MTPA with total Excavation 0.259MTPA along with Mobile Crushing & Screening Plant (400TPHx10 Nos & 250TPHx07 Nos), CPU 2000 TPH, Grinding & Beneficiation Plant 6.0MTPA for Mineral Processing & Slurry Pumping Station to transport Iron Ore Concentrate in the ML area 349.254Ha by M/s Jsw Steel Ltd located at Sundargarh, Odisha.

The instant proposal was earlier recommended by the EAC vide minutes of the 38th EAC-NCM meeting held on 27.12.2024.

However, a complaint was received in the Ministry regarding construction of Beneficiation plant in the project more than capacity stipulated in old EC condition on 26.12.2024.

An Additional Details Sought (ADS) was raised to the Project Proponent (PP) seeking a pointwise reply to the issues raised in the complaint. In reply to the ADS PP stated that *"The construction of crushing and screening plant is started for sizing of iron ore without any upgradation of quality for which CTE is obtained from SPCB-Odisha dated 04.12.2021 as per the provision of Air and Water Act. This shall cater the present production capacity of 6 million Tones. It may be noted that the same is not covered by the provisions of EIA Notification, 2006 as clarified in the OM dated 22.09.2008 of MoEFCC. We would like to confirm that no construction activity related to the 6.0 MTPA Beneficiation Plant has begun. MoEFCC may depute any official to check the fact. Additionally, we want to add that no procurement orders for beneficiation equipment have been placed to date"*.

However during 38th EAC meeting on 27.12.2024, PP had submitted that *"they are constructing a beneficiation plant with capacity of 2 MTPA along with crusher and screening plant within the Mine Lease area as per earlier EC dated 18.06.2019"* and it was minutised in the 38th EAC NCM meeting.

Since the PPs submissions were different in its ADS reply dated 02.03.2025 and its submission during 38th EAC meeting dated 27.12.2024 it was decided after taking inputs from EAC members that RO Bhubaneswar may conduct a site inspection and verify the construction of crushing screening plant and beneficiation plant.

Subsequently an ADS was raised asking that *"PP needs to obtain and submit a report on current status of installation of beneficiation plant in the project after site inspection by MoEFCC RO, Bhubaneswar"*.

Accordingly RO Bhubaneswar undertook the site inspection and reported that *"During visit incomplete construction was observed on the premises. PP reported that 80 Percent of construction of 2000 TPH crushing and screening plant construction and erection work is completed. It was also reported that it is likely to be completed by July2025. During visit installation of beneficiation plant part has not been observed. The construction activity observed on 26.03.2025 at the proposed central processing unit for conveyor, primary crusher, screens, cone crusher, stackers, ECR buildings and the stacker along with proposed electrical control room -II for stacker.The construction activity of the beneficiation plant is yet to be started."*

Since the PPs ADS reply dated 02.03.2025 and report of RO Bhubaneswar after site inspection on 04.04.2025 were not in consonance with 38th EAC minutes therefore the proposal was again referred to EAC in its 43rd EAC meeting on 22-23.04.2025.

During the meeting PP stated that the construction of crushing and screening plant has been started for sizing of iron ore without any upgradation of quality for which Consent to Establish (CTE) is obtained from SPCB-Odisha vide letter no. 19304/IND-II-CTE-6577 dated 04.12.2021 as per the provision of Air and Water Act.

EAC noted the submission of PP and enquired whether the CTE obtained vide letter dated 04.12.2021 was in accordance with EC dated 18.06.2019. PP stated that upon grant of mining lease in the year 2020, M/s JSW Steel Ltd planned to establish a 2000 TPH screening and crushing having the same total capacity as provided in the EIA /EMP report of EC of 2019.

PP further stated that they envisaged to replace multiple smaller capacity mobile screening and crushing plant with single point fixed crusher & screen plant for achieving enhanced efficiency, better environmental management by providing suitable enclosures to all the equipment, provide network of dry fog dust suppression system, dust extraction system and development of surrounding green belt area on the proposed location. EAC noted that the EC issued to the project dated 18.06.2019 was given for the following configuration of crusher and screening:-

S.No.	Crusher/Screening	Capacity	Numbers	Total
1	Mobile Screening	200 TPH	3	600 TPH
2	Mobile Screening	150 TPH	4	600 TPH
3	Mobile Screening	100 TPH	2	200 TPH
4	Fixed Crusher	350 TPH	1	300 TPH
5	Mobile Crusher	150 TPH	1	150 TPH
6	Mobile Crusher	100 TPH	1	100 TPH
7	Stand by Mobile Crusher	150 TPH	1	150 TPH
8	Stand by Mobile Crusher	100 TPH	1	100 TPH
8	Stand by Mobile Screen	150 TPH	2	300 TPH
9	Stand by Mobile Screen	100 TPH	1	100 TPH
10	Stand by Mobile Screen	200 TPH	1	200 TPH
11	Revolving Screen	10 TPH	1	10 TPH

As per the earlier EIA EMP report total capacity of 1400 TPH of Mobile screen and 600 capacity of stand by Screen was mentioned. Similarly, 350 TPH fixed crusher, 250 TPH mobile crusher and a standby of 250 TPH mobile crusher was mentioned along with 10 TPH revolving mobile screen.

Furthermore, with regard to construction of beneficiation plant which was recorded in the minutes of 38th EAC-NCM meeting held on 27.12.2024, PP reiterated that they have not undertaken any construction activity related to the Beneficiation Plant in the ML area and this fact has been also mentioned in the Regional office, MoEFCC report dated 04.04.2025. PP also expressed their regret for not bringing the fact in front of the EAC during the 38th EAC-NCM meeting held on 27.12.2024.

EAC noted that as per the Regional office of MOEFCC report *“PP reported that 80 % of construction of 2000 TPH crushing and screening plant construction and erection work is completed”*.

Beside above, EAC noted that two CTEs were issued to the project by OSPCB dated 04.06.2021 and 04.12.2021 with some variations in configuration of crushing and screening facility. Accordingly, EAC asked PP to provide a comparative analysis of the ongoing construction of crushing and screening facilities in comparison with earlier EIA EMP report (on the basis of which EC dated 18.06.2019 was issued) and Consent to Establish dated 04.06.2021 and 04.12.2021 issued by OSPCB.

In view of the above, EAC **deferred** the proposal for want of following requisite information:-

- i. PP needs to provide a comparative analysis of the ongoing construction of crushing and screening facilities in comparison with earlier EIA EMP report (on the basis of which EC dated 18.06.2019 was issued) and Consent to Establish dated 04.06.2021 and 04.12.2021 issued by OSPCB.
- ii. PP needs to explain whether there is any change in pollution load due to project activities in the context of variations in configuration of crushing and screening facilities in the project.

Additional Agenda No. I

Site Inspection Report

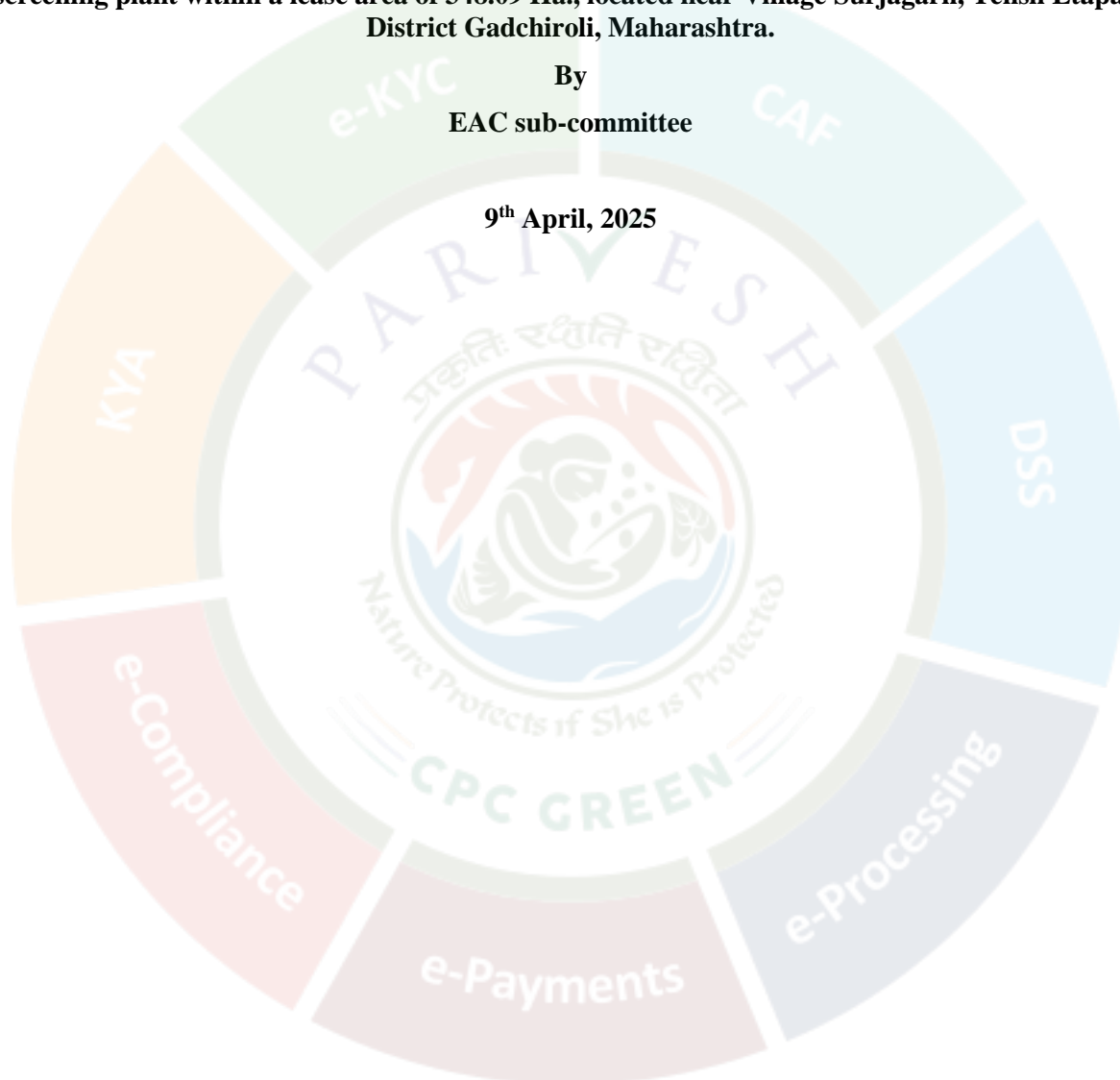
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Surjagarh Iron Ore Mines of M/s Lloyds Metals and Energy Limited for Expansion of Iron Ore production capacity from 10 MTPA to 26 MTPA Hematite, 45 MTPA BHQ (Banded Hematite Quartzite), 5 MTPA Waste (Total Excavation: 60.0 MTPA) along with crushing and screening plant within a lease area of 348.09 Ha., located near Village Surjagarh, Tehsil Etapali, District Gadchiroli, Maharashtra.

By

EAC sub-committee

9th April, 2025



Background

The project under consideration is for expansion of Iron Ore production capacity from 10 MTPA to 26 MTPA Hematite, 45 MTPA BHQ (Banded Hematite Quartzite), 5 MTPA waste (Total Excavation: 60.0MTPA) along with crushing and screening plant (Primary crushing plants -3 x 3000 TPH Gyratory crusher, 1 x700 TPH Jaw crusher, 1 x 350 TPH Jaw crusher, 5 x 250 TPH Jaw crusher, Secondary crushing plants: 12 x 625 TPH Cone crusher, 1 x700 TPH Cone crusher, 1 x 350 TPH Cone crusher, 5 x250 TPH cone crusher, Screening plants : 12x 625 TPH Screen plant, 5 x 900 TPH Screen plant, 3 x 400TPH Screen plant, 2 x 250 TPH Screen plant) in the Surjagarh Iron Ore Mine lease area of 348.09 Ha., located near village Surjagarh, Tehsil Etapali, District Gadchiroli, Maharashtra by M/s. Lloyds Metals & Energy Ltd.

The project was considered during the 41st meeting of the Expert Appraisal Committee (Non-Coal Mining), held on 27th February 2025. During the meeting, the Project Proponent (PP) informed that the proposed expansion aims to meet the local demand of sponge iron and steel plants in Maharashtra, thereby reducing dependence on supplies from Odisha and Chhattisgarh. The PP further submitted that a significant portion of the proposed expansion involves the production of 45 MTPA of low/lean grade ore, specifically Banded Hematite Quartzite (BHQ). It was also reported that, following beneficiation, approximately one-third of the BHQ i.e. around 15 MTPA would yield usable iron ore.

Considering the ecological sensitivity of the region the EAC was of the opinion that special attention must be given to the conservation of local biota, water resources, biodiversity, and habitat protection. Environmental safeguards may be in place/taken to minimize adverse impacts on the surrounding ecosystem. Impacts of ore transportation on road, its surroundings, safeguards at railway siding area also needs to be ascertained. Accordingly, to gain further clarity on the proposed expansion of the project the EAC recommended that a sub-committee of the EAC might be constituted to undertake a site visit of the project. Based on the report of the subcommittee the proposal may be considered in the future EAC meeting.

Site Visit

Accordingly, Ministry, vide letter dated 01st April 2025 constituted a sub-committee comprising of the following members to ascertain the ground realities of the project.

1. Shri Niranjana Kumar Vasu, EAC Member
2. Shri Bandi Ramchandra Reddy, EAC Member
3. Dr. Krishnendu Mondal, Scientist 'D', IA(NCM), MoEF&CC; and

Representative from MoEFCC, Regional office, Nagpur, Maharashtra. Dr. Surender Gugloth, Scientist 'E' was nominated for the site inspection.

The aforesaid committee undertook the visit on 09th April 2025, and during the site visit, the following officials were present from M/s Lloyds Metals and Energy Limited.

1. Shri B Prabhakaran, Managing Director
2. S Venkateswaran, Executive Director/Agent Mines
3. Shri R R Satpathy, Executive Director
4. Shri G Kumarasamy, Sr.VP- Environment
5. Shri Jiwan Hedau – GM/Mines Manager

During the journey to the mine site, the Subcommittee visited the construction site of the Pellet Plant located in Konsari. The Project Proponent (PP) informed the Subcommittee that all construction

activities related to the Pellet Plant are expected to be completed by the end of the current financial year. The Subcommittee also observed the receiving end of the slurry pipeline and noted that approximately 90 kilometers of the pipeline have been laid.

The Subcommittee also visited the Skill Development Centre located in Village Aldandi. It was noted that the Centre aims to generate a skilled construction workforce from remote villages, including active participation from women.



a. Location of the project site and Habitat

The mine is located in Worria Hill, near Surjagarh Village, Etapalli Taluk, Gadchiroli District, Maharashtra. There are no habitations within a 2.0 km radius of the mine site. During the visit, the Subcommittee observed the presence of an armed outpost in close proximity to the site. The approach road to the mine is connected to a 12-meter-wide bitumen road, which further links to State Highway 363 (SH 363) near Village Hedri, approximately 5 km away.

The proposed mining area, covering an extent of 348.09 hectares, falls within the Bhamragarh Reserve Forest. The mine boundary pillars have been demarcated on-site using DGPS and have been duly authenticated by the State Government. The Subcommittee visited Boundary Pillar No. 10 and verified its location against the authenticated DGPS map.



b. Existing Mining activities

The Subcommittee visited the eastern pit, central pit, and the pilot plant located on the Western Hill of the mine site. The Project Proponent (PP) provided a detailed briefing and demonstration of various equipment and operational features. The Subcommittee observed the functioning of an electric drill and a Hitachi EX 1200 excavator, which has been successfully converted from a diesel-powered to an electric-driven system. Additionally, the Subcommittee witnessed a 70-ton battery system, which generates power through regenerative braking during downhill operations. The team also inspected the screening plant, crusher plant, and the use of battery-operated wheel loaders for mineral reloading, along with a battery-operated light motor vehicle (LMV) used for internal transportation.

The Subcommittee also visited the mine faces and observed the presence of both hematite and Banded Hematite Quartzite (BHQ) patches within the exposed formations. It was noted that hematite is predominantly found in the upper layers and is closely associated with the BHQ formation, which underlies it as a massive layer. During the field inspection, the Subcommittee confirmed that hematite occurs along with intrusions of BHQ, indicating a complex geological association. As part of the mining process, both hematite and BHQ are to be extracted simultaneously from the top slice to ensure systematic and scientifically managed mining operations.



The waste generated is being temporarily dumped within the mining lease area at designated locations situated in non-mineralized zones. The Project Proponent has constructed adequate drainage systems, check dams, settling/harvesting ponds, and retaining walls using RCC and gabions to prevent silt runoff prior to discharge from the lease area. The dumps are properly maintained with multiple benches and slopes, and measures such as coir matting and silpaulin sheets have been deployed to control soil erosion. The Subcommittee inspected Boundary Pillar No. 10 and surrounding areas and observed the safety zone, plantation, adjoining forest area, RCC retaining wall, and rock-fill gabion wall.

Furthermore, the Subcommittee also observed that the adjacent mineral ore sizing and screening plant is operational and equipped with adequate dust suppression measures, such as dry fogging systems, mist cannons, and covered conveyors with protective hoods.



The Project Proponent further informed that out of a total workforce of approximately 3,200 employees, over 2,500 are engaged from the local community. The Subcommittee interacted with around 20 employees operating dumper trucks and also met several women operators from the local community who have been trained to operate dumpers and trucks



The Project Proponent informed that the processed iron ore is being transported via trucks, either to railway sidings or directly to customer plants. It was observed that loading operations are carried out below the truck deck level to minimize spillage, and tarpaulin covers are used to control dust during transportation. A wheel washing unit has been installed at the mine exit, and a road sweeping machine is regularly deployed to clean the mineral transportation routes.



Further, the Subcommittee witnessed the adequate no of mobile sprinklers, permanent sprinklers, fog canons engaged in dust suppression.

c. **BHQ Resources augmentation and Pilot Plant**

a) The Project Proponent (PP) informed that they have undertaken an initiative to conduct exploration drilling for Banded Hematite Quartzite (BHQ), which was previously considered waste during iron ore mining operations.

b) The PP further stated that Tata Steel Industrial Consultancy, a division of Tata Steel Limited, Jamshedpur, was engaged to guide the exploration activities and prepare the Geological Resource Statement in accordance with the Mineral (Evidence of Mineral Contents) Rules. The PP also shared the credentials of Tata Steel, highlighting its service record with other major mining entities, including Rungta Sons, Gujarat Mineral Development Corporation, Hindalco Industries, National Mineral Exploration Trust (Ministry of Mines), and Neelachal Ispat Nigam Limited.

c) The PP reported that approximately 204 boreholes were drilled for resource estimation, resulting in the identification of approximately 701 million tonnes of BHQ and 155 million tonnes of Hematite. These estimates were approved by the Indian Bureau of Mines (IBM), Ministry of Mines, as of June 2024.

d) Bench-scale and laboratory-scale beneficiation studies for BHQ were undertaken in collaboration with various government laboratories, including the Modern Mineral Processing Laboratory of IBM (Ministry of Mines), Nagpur, and the CSIR - Institute of Minerals and Materials Technology (IIMT), Bhubaneswar.

e) The outcome of the studies indicated that BHQ is amenable to beneficiation, with the potential to enrich the iron content from 25–32% Fe to over 65% Fe. The processed material showed silica and alumina contents of less than 2%, which is expected to reduce coke consumption in steel manufacturing.

f) The PP has constructed and is currently operating a state-of-the-art BHQ Pilot Scale R&D Beneficiation Plant at the Surjagarh mines, which has been operational since July 2024.

g) The results from the pilot plant revealed that the beneficiated BHQ achieved an iron content of over 67% Fe, up from an average of 32% Fe.

The Subcommittee visited the Pilot Plant established on the western hill of the mining lease area and, *en route*, observed the presence of undisturbed forest cover within the lease boundary. The Project Proponent (PP) informed that High-Pressure Grinding Rolls (HPGR) are being used to reduce the size of the BHQ material to approximately 3 mm. Further processing involves the use of a ball mill and vertical mill (VertiMill), while magnetic separators are employed to segregate magnetic and non-magnetic materials. Additionally, flotation cells are used to separate BHQ ore based on density. The PP stated that tailings generated from the process are handled through filter presses to form cakes in an almost dry state, which are then stacked in a phased manner at the Tailings Storage Facility (TSF). The filtered water is recirculated and reused in the beneficiation process.

The PP also showcased various community welfare initiatives, including a 30-bedded hospital, a CBSE-affiliated school, and a garment unit, all established and operational at Hedri. The Subcommittee interacted with school children, hospital staff, and patients during the visit.



It was further informed that the hospital provides free medical treatment and medicines, including emergency care and laboratory facilities, to people residing within a 100 km radius of the district, operating 24x7. The school has been set up to serve students from surrounding villages, with transportation facilities provided for commuting to and from the school. Moreover, uniforms, meals, and all educational expenses are borne entirely by the institution, ensuring free education for all enrolled students.



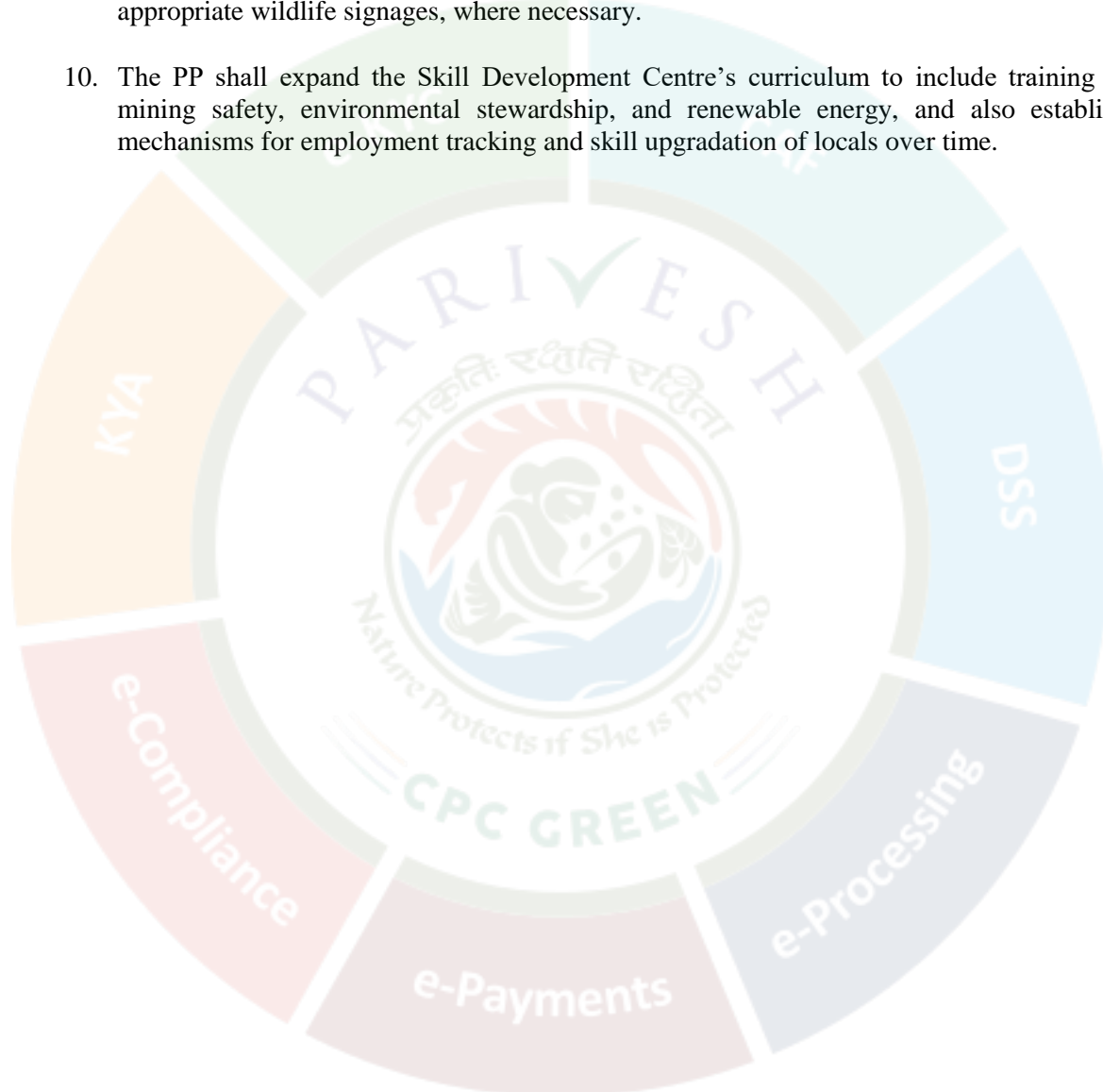


During the site inspection, it was observed that all mining operations are conducted with the use of appropriate PPE. Adequate measures for dust suppression were also noted, including the deployment of mobile water sprinklers, fixed sprinklers, and mist cannons at strategic locations such as haul roads and processing plants. The Subcommittee confirmed the adequacy of these measures in controlling dust emissions.

d. Recommendations of the Committee:

1. Bhamragarh Reserve Forest along with other forest areas in the district is a part of larger continuous forest landscape in the state of Maharashtra and Chhattisgarh that helps in maintaining long term integrity of forest ecosystems and dispersal of wild animals across the landscape. Given the ecological sensitivity of the Bhamragarh Reserve Forest, the PP shall implement recommendations of the wildlife Conservation Plan in letter and spirit in consultation with the Forest Department. Periodic monitoring of flora and fauna should be continued in the 10 km radius of the project. Compliance report of the same may be submitted to MoEFCC Regional Office, Nagpur along-with six monthly compliance report as stipulated in the Environmental Clearance.
2. PP needs to carry out Biodiversity survey using systematic sampling on species diversity, abundance, and habitat quality. Continuous monitoring helps detect changes in populations, habitat degradation, and invasive species.
3. The PP shall prepare a phased mine closure plan with timelines, including progressive reclamation of mined-out areas, plantation with native species, stabilization of waste dumps, and post-mining land use. This plan should be updated periodically and monitored by an independent agency.
4. The PP must complete slurry pipeline infrastructure within the timeframe to reduce dependency on road transport and minimize dust, spillage, and traffic congestion. Until such infrastructure is operational, enhanced monitoring and road maintenance must be ensured.
5. Although filtered tailings and water recycling were noted, the PP should develop a comprehensive water balance and risk assessment plan, ensuring no discharge from lease boundary and contingency arrangements during monsoon or TSF overflow situations.
6. The existing CSR initiatives (hospital, school, skill development) are commendable. The PP should scale these programs based on community needs assessments, especially in tribal-dominated areas, and consider third-party social audits to improve outreach and effectiveness.

7. The PP should carry out regular geotechnical and stability studies of waste dumps, especially during monsoon, and enhance slope protection measures.
8. Continuous real-time air quality monitoring should be operational at sensitive receptors and within the lease area. Additionally, the effectiveness of dust suppression systems (like fogging/misting) should be audited regularly with scope for augmentation.
9. Being located in a forested zone, the PP shall coordinate with the State Forest and Wildlife Department to assess potential wildlife corridors, minimise night-time transport, and install appropriate wildlife signages, where necessary.
10. The PP shall expand the Skill Development Centre's curriculum to include training in mining safety, environmental stewardship, and renewable energy, and also establish mechanisms for employment tracking and skill upgradation of locals over time.





Mining operation: LNG - Despatch truck loading along with mist canon



Mining operation: Mist Canon on Haul Road



Mining operation: Mist Canon on Haul Road



Mining operation: Fixed Water Sprinkling



Mining operation: Fixed Water Sprinkling



Mining operation: Mobile Water Sprinkler



Safety zone pillar along with Safety zone plantation and Solar fencing



Safety zone pillar along with Safety zone plantation and Solar fencing



Safety zone Gap plantation



DG Set with prescribed stack height

Additional Agenda No. II

Site Inspection Report

Subject: Site Visit Report of Gundlapalli Limestone mine for enhancement in production capacity of Limestone from 1.0 to 3.0 MTPA in the mine lease area of 130.37ha by M/s NCL Industries Limited located at Village Gundlapalli, Mandal Matampally, District Suryapet, Telangana- For Environmental Clearance reg.

[Online Proposal No. IA/TG/MIN/433538/2023; File No.J-11011/576/2008-IA.II (I), EIA Consultant: M/s Pridhvi Envirotech Pvt Ltd]

The instant proposal of Gundlapalli Limestone mine for enhancement in production capacity of Limestone from 1.0 to 3.0 MTPA in the mine lease area of 130.37 ha by M/s NCL Industries Limited located at Village Gundlapalli, Mandal Matampally, District Suryapet, and Telangana was considered in the 34th EAC Meeting held during 3-4 October 2024 owing to the applicability of General conditions since the project site is located at a distance of 220m N from the interstate boundary of Telangana and Andhra Pradesh.

II. Vide minutes of the aforesaid meeting, EAC recommended that a sub-committee of EAC (NCM) may conduct a visit to the project site to assess mining safety, flow of silt & water from project to river or its tributaries specifically in relation to the proximity of the existing Krishna River.

III. In view of the above, Ministry vide order dated 21.03.2025 constituted a sub-committee comprising of following members to undertake the site visit during 26-28 March 2025:-

1. Shri Avijit Ghosh
2. Prof. Pramod Kumar
3. Representative of DGMS
4. Shri Tarun Kathula, Scientist F Sub-Regional Office of MoEFCC at Hyderabad
5. Shri Vidyasagar Jha, Research Officer, MoEF&CC

IV. Accordingly, the sub-committee conducted the site visit during 26-28 March 2025. The sub-committee was accompanied by following project officials:-

1. Shri G Subba Rao , Sr DGM (Mines)
2. Shri Ravishankar Deverakonda, General Manager
3. Shri Janakiram Reddy, DGM
4. Shri S Chakradhar Senior President
5. Shri T Satish Kumar, Sr DGM (HR)

V. During the visit, the sub-committee **observed** the following:-

1. The approach road from the existing cement plant to the mine lease (ML) area was generating significant dust. Only minimal avenue plantation was observed along this stretch. The Project Proponent (PP) informed that the Sultanpur Thanda mine, situated adjacent to this road, is also owned by M/s NCL Industries. PP also mentioned that approach road outside ML area is a forestland and they have obtained diversion for the same for transportation. Sub-Committee observed that PP has constructed a bridge since the western part of the lease area is a water spread area. PP informed that they started constructing this bridge during the year 2009, owing to the flow of water from Pulichinthala dam. The approach road is connected with bridge and is used for transportation of mined out ore. Several avifauna were also observed in the waterspread area, which converges in the form of a canal in the northeastern part of the ML area, pillars of irrigation Department were also observed in this region from a farther distance.



Haul Road and Approach road without any permanent sprinkler

2. As informed by PP, sub-committee noted and observed that a considerable portion of the ML area in Western side, Southern Side and Southeastern side has been subsumed by the water of the Krishna River during the site visit.



Water Spread Area within the ML area

3. An active mine pit was present within the ML area. The sub-committee observed that the side of the benches were nearly vertical and loose stones were found on the sides, and edges/sides were not cleaned and kept secure. The width of the haul roads was not maintained three times the width of the dumper plying on it, sharp curves were formed in the working bench and berms of adequate size were not provided. Dust suppression on haul roads and mine workings were found in adequate. Additionally, water seepage into the pit was observed, reportedly originating from the Krishna River and Water spread area located adjacent to the lease area. PP clarified that no water bodies existed in the vicinity before the Pulichinthala Dam's construction in 2013. As per PP, the instant water spread area only came into existence after the construction of Pulichinthala Dam. PP reported that owing to the dam a major chunk of their lease area has been submerged in the eastern and southern side.



Active mine pit from the mine viewing area

4. The 7.5-meter-wide safety zone along the ML boundary lacked adequate plantation. Only a small stretch was planted, and it consisted mainly of exotic species.



7.5 m safety plantation

5. No dumping activity was found in the ML area. The PP stated that all excavated material is utilized in their cement plant, and there is no generation of overburden, interburden, or topsoil.
6. Aside from the mine pit, no rainwater harvesting structures were observed.
7. An online air monitoring system was not installed within the ML area.
8. Although an oil and grease trap was present, there was no covered structure nearby for storing separated oil.



Oil and Grease Trap without shade

9. Permanent water sprinklers were not installed anywhere in the ML area, including along the permanent haul roads. PP reported that the dust suppression is being carried out by mobile tankers, however, logbook of the same indicating kilometre reading period of operation and maintenance were not provided.
10. No topsoil dump was found in the ML area. According to the PP, the region lacks topsoil. The sub-committee observed that the terrain was largely rocky and barren with few stretches of naturally grown plant species.

11. While some permanent boundary pillars were in place, they were missing at several locations. Sub-Committee members visited the Boundary Pillar number 4 located at N 16° 42' 48.61" – E 79° 51' 46.20" - RL – 59 Meters and Boundary pillar no. 1 located at N 16° 43' 10.35" – E 79° 50' 54.80" RL:56 Meters.



Boundary pillar no. 4 (left) and boundary pillar no.1 (right)

12. Segments of a retaining wall were found on the southern side of the ML area. The PP mentioned that the Directorate General of Mines Safety (DGMS) had directed them to construct both a retaining wall and a bund in this area, near the waterspread area of the Krishna River. DGMS has directed to construct bund as mentioned in para 13 (a) On perusal of the plan no.NCL/ASTGLM/DMS-PERM-106-2b/2023/DECM/01 dated 30.12.2023 available at DGMS office it was found that the Krishna River is flowing through the mine boundary. Further, the mine surveyor stated that the south side lease boundary pillars (No.27 & no.28) are drowned in water of Krishna River and are not approachable. As per above plan, the bottom bench lowest RL of working pit No.2 was about 32.11m. Which is much below the HRL of the Pulichintala Dam.



Retaining wall

13. The PP had obtained permission under Regulation 127(1) to work in the HFL zone area of Pulichintala Dam HFL Line of the mine vide DGMS letter no. HR.2/SCZ/127(1)/174(16)/2016/3238-39 dated 04.11.2016. Few important permission conditions are as follows:-

- a) As per permission condition no.1. Management shall construct a bund/embankment as shown in the plan no. NCL/Mines/GLM&SLM/DMS/PER-61.1(a):2016:July:01 dated 24.06.2016 of 5m height above the HFL having base 9m width and top of the bund shall not be less than 3m width stoned pitched on either side. At every 10m interval on the top of the bund/embankment, its Reduced level shall be marked. During the site visit, it was observed that only a few stretches of the said bund had been constructed, and the work did not conform to the specified design requirements. The width of the constructed portion of the bund, as measured by the surveyor, was approximately 1.2 meters. The nearest water spread area was located at a distance of 28 meters from the bund.



1.2 m wide bunds constructed by the project proponent

- b) **As per permission condition no.3.** No working shall be made between the nallah and the dam as shown on the plan no. NCL/Mines/GLM&SLM/DMS/PER-61.1(a):2016:July:01 dated 24.06.2016. The mine management did not apprise the matter to the

sub-committee. During site visit, the mine workings were observed carried out between nallah and the dam. One excavator and two tippers were found deployed. Accompanying officials stated that as it was lunch time the workings were stalled after lunchtime working will resume. Further, it appeared that the proposal for enhancement in production capacity of Limestone from 1.0 to 3.0 MTPA lays in the said mine lease area.

- c) In the surface plans HFL of the Nalla and Krishna River were not shown. In plan only HRL of Pulichintala Dam (+RL 53.34m) was mentioned.
- d) During the site visit of the mine, surveyor measured the spot RL's with hand held GPS unit. It showed about 48m at the retaining wall constructed at the south side of the mine, but on surface plan RL was about 56m. The distance of the retaining wall from the nearest water spread area was measured by the surveyor and it was found to be 10m.
- e) A mile stone marked in yellow color found laying (uprooted) on the ground near the retaining wall, accompanying officials of the mine informed that the milestone was laid by the Dam authorities and its was HRL of Pulichintala Dam (+RL 53.34m), but on RL with the handheld GPS was about 48m. The distance of the water spread area was about 5 m from the yellow colour milestone. The catchment area of the Pulichintala Dam was not shown on the plan and was not explained during the site visit to the subcommittee.



Yellow colour milestone

14. As per DGMS records , amalgamation of mine boundary of Sultanpur Thanda Limestone Mine and Gundlapally Lime stone Mine of M/s NCL Industries Limited, under Regulation 111 of the MMR, 1961 was done vide letter No.HR.2(SZ)/PERM/111/2009/1498-1501 dated 03.07.09. Now the mine is

Sulthanpur Thanda-Gundlapally Limestone Mine at survey no.63 & 170P (extent 322.06 acres) of Gundlapalli Village and at Survey No.540P (extent: 105.32 Acres) (total lease area 427.95 Acres) of Pedaveedu Village, Mattampally Mandal, Suryapet District, Telangana State.

15. Beside above, significant dust clouds were observed near the public road in front of the cement plant. The sidewalks and avenue trees in the vicinity were heavily covered in dust.

VI. Based on the above observation, sub-committee **recommended** the following:-

1. PP needs to install permanent water sprinklers along the mine approach road and permanent hauls roads used for transportation. Additionally, PP shall explore to install OLBC system to transport mined out ore to the cement plant.
2. PP shall carry out the 7.5-meter-wide safety zone plantation along the ML boundary. PP may plant native species of 10 ft height and shall ensure that survival rate is atleast 95%. Plantation activities should be completed by the end of monsoon of 2025.
3. It was observed during site visit that some portions of the ML area is submerged in Krishna river/Water spread area. PP should inform IBM, State DMG and District Mining Authorities about the submerged portions of the ML area and submit a copy of the same to Ministry.
4. PP should erect Boundary pillars along the ML boundary. The submerged boundaries also needs to worked out and floating boundary pillar may be installed to indicate the lease extent at pillar no. 27 and 28. The same should be communicated/informed to State DMG and IBM.
5. PP shall construct a bund/embankment as shown in the plan no. NCL/Mines/GLM&SLM/DMS/PER-61.1(a):2016:July:01 dated 24.06.2016 of 5m height above the HFL having base 9m width and top of the bund shall not be less than 3m width stoned pitched on either side. At every 10m interval on the top of the bund/embankment, its Reduced level shall be marked. The same shall be communicated to Directorate General of Mines Safety (DGMS) and their recommendations may be followed.
6. A fresh survey shall be carried out and plan shall be prepared showing correct RLs and surface features, proximity of River, HFL of the River, etc., as required by statute and HRL of the Pulichintala Dam, catchment area of Pulichintala Dam etc. The survey report shall be communicated to DGMS and their recommendations may be followed.

7. The sides of the bench should be sloped at an angle of not more than 60° from the horizontal and free of loose stones & kept secure. Recommendations of the Scientific Slope Study should be followed. The width of the haul roads shall be maintained three times the width of the dumper plying on it, curves on the haul roads shall be of adequate radius, and berms of adequate size shall be provided. Adequate dust suppression arrangements shall be provided. An action taken report of the same shall be communicated to DGMS and their recommendations may be followed.
8. No working shall be made between the nallah and the dam as per permission obtained under the Regulation 127(1) of the MMR, 1961 vide no. HR.2/SCZ/127(1)/174(16)/2016/3238-39 dated 04.11.2016.
9. The catchment area of the Dam shall be collected from Irrigation Department/Dam authorities and shall be marked on all the plans and in mine.
10. PP shall consult SPCB/CPCB and shall install a CAAQMS within the ML area. The data generated shall be linked online with the server of SPCB/CPCB and shall also be displayed at Mine Entry and Cement Plant entry.
11. PP shall explore to construct rainwater-harvesting structure within the ML area. PP shall also ensure that there is no flow of surface water from ML area to the waterspread area and outside of ML area. Adequate catch drains, siltation ponds and retaining wall should be constructed for the above.
12. Appropriate arrangement/covered shed structure should be constructed to store collected oil from oil & grease trap. Withdrawn oil may be disposed as per the rules and regulations..
13. PP shall consult DGMS and construct the entire stretch of bund as per the specifications provided by the Directorate.
14. PP shall carry out avenue plantation alongside the approach road.
15. Dust clouds were observed near the public road in front of the cement plant. PP should maintain the public road in front of cement plant at least 100 m on both sides and shall undertake regular sprinkling of water to ensure no dust is generated during transportation of heavy vehicles. It is also advised to undertake grassing/ paving of sidewalk along both side of the road for atleast 100m.
16. Since the current proposal is to expand the Gundlapalli Limestone mine towards the north-eastern side of the mine, around 800 m away (as reported by PP) from the submergence area, all mining safety precautions proposed above must be followed as per the statutes to stop water from ingressing/seepage into the

proposed mine expansion. Necessary permissions may be taken from DGMS in this regard.

17. The project proponent (PP) shall also communicate all rectification data and the corresponding report to the Directorate General of Mines Safety (DGMS) and the Indian Bureau of Mines (IBM).



Main haul road without any permanent sprinkling system within the ML area.



List of members of 43rd Expert Appraisal Committee participated through VC

S.No.	Member Name	Member Address	Designation	22 nd April 2025	23 rd April 2025
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	No	No
2	Sh. Niranjan Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171	Member	No	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 (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	Yes	Yes
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	No	No
7	Prof. Devesh Walia, Department of Environmental Studies, Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes	Yes
8	Dr. Suresh Tiwari, Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Vij Marg Rajinder Nagar, New Delhi - 110060	Member	Yes	Yes
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadillnd Stage, Mysore-	Member	Yes	Yes

		570026, Karnataka			
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 Saifullah Ansari (Representative of Directorate General of Mines Safety)	Representative of Directorate General of Mines Safety	Member	Yes	Yes
14	Shri Rajeev Ranjan	2 nd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi-110003.	Member Secretary	Yes	Yes
15.	Shri S.R. Wate,	148/149, Nagar Vikas Society, Narendra Nagar, Nagpur-440 015, Maharashtra.	Special Invitee	Yes	Yes
