

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

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**SUMMARY RECORD OF 3<sup>RD</sup> MEETING OF THE COMMITTEE OF THE RE-CONSTITUTION OF EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.**

The 3<sup>rd</sup> meeting of the Re-constitution of Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held on 5<sup>th</sup> September, 2022 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC, discussion on each of the Agenda Items was taken up ad-seriatim.

**(1.0) Deliberation & Circulation on the Minutes of 2<sup>nd</sup> EAC meeting held during 16<sup>th</sup> – 18<sup>th</sup> August, 2022:**

The minutes of 2<sup>nd</sup> EAC meeting held during 16<sup>th</sup> - 18<sup>th</sup> August, 2022 were placed before the members of the Committee.

**Day 1: 5<sup>th</sup> September, 2022 (Monday)**

**1.1 Amanganj Limestone Mine of M/s Eco Cements Limited with proposed production capacity of Limestone: 3.75 Million TPA, Top Soil: 0.40 Million TPA & OB/IB: 9.60 Million TPA (Total Excavation: 13.75 Million TPA) along with installation of 1600 TPH Capacity of Crusher in the mine lease area of 1793.59 ha, located at Villages: Beli, Baraha Kala, Hinouti, Tehsil: Gunour and Villages: Chikalhai, Daharra, Gaura, Hinouta Mishra, Kanti, Mahewa, Patelpura, Pawaiya, Tehsil: Amanganj, District: Panna, Madhya Pradesh – [F.No: J-11015/29/2020-IA.II(M), Proposal No: IA/MP/MIN/227653/2021 dated 10.08.2022, Consultant: J.M. EnviroNet Pvt. Ltd] – Environmental Clearance**

The instant proposal is for mining of Limestone in Amanganj Limestone Mine of M/s Eco Cements Limited with proposed production capacity of Limestone: 3.75 Million TPA, Top Soil: 0.40 Million TPA & OB/IB: 9.60 Million TPA (Total Excavation: 13.75 Million TPA) along with installation of 1600 TPH Capacity of Crusher in the mine lease area of 1793.59 ha, located at Villages: Beli, Baraha Kala, Hinouti, Tehsil Gunour and Villages Chikalhai, Daharra, Gaura, Hinouta Mishra, Kanti, Mahewa, Patelpura, Pawaiya, Tehsil Amanganj, District Panna, Madhya Pradesh.

2. Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- (i) The mine lease area is located between Latitude: 24°23'10.44"N to 24°28'34.00"N and Longitude 80°04'21.03"E to 80°11'38.65"E. The mine lease area falls under the Survey of India Toposheet No: G44U3 and falls in Seismic Zone - II.
- (ii) The proposed project activity is listed at schedule no. 1(a) Mining of Minerals of the schedule of the EIA Notification, 2006 and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- (iii) The project was granted Terms of Reference (ToR) by the Ministry vide its letter no J-11015/29/ 2020-IA.II(M) dated 17.11.2021 based on recommendation of sectoral EAC meeting held during 15<sup>th</sup> – 17<sup>th</sup> September, 2021.
- (iv) Details of Mine lease of the project:

S. No.	Grant of Pl/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Prospecting License vide Lr no. F-2-2/2011/12/1, Bhopal	16.04.2013	Limestone	2 years	Govt., of Madhya Pradesh	1826.19
2	Letter of Intent vide No F 3-86/2015/12-1, Bhopal	06.02.2017	Limestone	50 years	Govt., of Madhya Pradesh	1793.59
3	Grant of mining lease vide F 3-86/ 2015/12-1, Bhopal	06.10.2018	Limestone	50 years	Govt., of Madhya Pradesh	1793.59

- (v) Details of executed Mine leases:

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	17.10.2019	16.10.2069	Deed for grant of mining lease executed between the Governor of Madhya Pradesh and M/s Eco Cements Ltd for a period of 50 years vide reference: MP28305201 9A1710144 dated 17.10.2019

(vi) Land Use/Land Cover of the Mine lease area:

Private land	1735.867 ha
Government land	57.723 ha
Total Mining lease area (MLA)	1793.59 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area

(vii) Details of Mining Plan:

Review of Mining Plan approved by Indian Bureau of Mines	Letter No.	MP/Panna/Limestone/MPLN/MOD-04/2021-22/5292, Jabalpur	
	Date	02.07.2021	
	Mine lease area	1793.59 ha	
	Mineral	Limestone	
	Validity	2021-22 to 2023-24	
Additional information (if any)	Project Proponent submitted that earlier Mining Plan along with Progressive Mine Closure Plan approved by IBM vide letter no. MP/Panna/Limestone/MPLN/G-24/18-19/5890, dated 10.08.2018. The Committee after detailed deliberations returned the proposal in the present form and advised the Project Proponent to fragment the lease into different phases and to revise the Mining Plan in consultation with IBM. Therefore, Modified Mining Plan along with progressive mine closure plan further approved by IBM dated 02.07.2021.		
Mining Parameters	Description		
Method of Mining	Fully – Mechanized Opencast Mining		
Total Geological Resources	156.290 Million Tonnes		
Mineable Reserves	87.67 Million Tonnes		
Life of mine	28 years It may be increased after proposed exploration		
Bench Height	10 m (max) (Max. 6 nos of benches, Five 10m height & one 5m height)		
Bench Width	25-30 m (max)		
Individual bench slope	For 5 to 9 m height benches: 65 <sup>0</sup> & 6 to 11 m height benches: 80 <sup>0</sup>		
Overall pit slope	45 <sup>0</sup>		
Drilling/Blasting	S. No.	Particular	Details
	1.	Bench height (m)	10 m (Max. 6 nos of benches, Five 10m height & one 5m height)
	2.	Bench Width (m)	25-30 m (working benches)
	3.	Drill hole dia	110 mm
	4.	Depth of hole	11 m
	5.	Burden	3 m
	6.	Spacing	5 m

	7.	No. of Drills required	330
	8.	Tonnage per hole	375 Tonne
	9.	Powder Factor	7.36 Tonne/Kg
Crusher	PP submitted that a crusher of 1600 TPH capacity is proposed to be installed near ML periphery in Block-1 which will be later shifted to Block-15 in conceptual period.		
RoM output size	<75 mm (+90%) size		
Transportation details	PP reported that the dump trucks of 55 tonne payload capacity are proposed to be used for transportation of limestone to the crusher (to be located in Block 1 & later on same will be shifted to block 15) and overburden rejects to the temporary dump yards. Crushed limestone will be transported to Cement Plant via covered belt conveyor (to be established in South direction). No transportation will occur through public transport road.		
Dumpers capacity	55 tonne		
Topsoil	PP reported that annually, 0.40 million tonnes of Top Soil & at conceptual stage, 4.26 million tonnes of top soil will be generated & same will be simultaneously used for greenbelt/plantation.		
OB/IB	PP reported that OB/IB consist of Overburden soil in the form of clay, murrum with shale and intermediate shale & shaly limestone. Annually, 9.60 million tonnes of OB/IB & at conceptual stage, 59.89 million tonnes overburden soil in the form of clay, murrum with shale and 77.45 million tonnes intermediate shale & 57.23 million tonnes shaly limestone will be generated. OB and shale shall be initially stacked in the waste dump yard and will be used in reclamation of excavated pits by backfilling. A part of lower shaly limestone shall also be used with the ROM limestone and part shall be kept separately for future use, if any and it will not be mixed with other waste rocks.		
Water level	12-18 m bgl		
Ultimate working depth	275 to 306m AMSL (13 to 55m bgl)		
Groundwater intersection	PP reported that there will be groundwater intersection due to mining activity.		

(viii) Water requirement:

Total water requirement	250.0 KLD	Fresh water	232.0 KLD
		Treated Water	18.0 KLD
Source	Initially, for 2 years the water requirement will be 100.0 KLD which will be sourced initially from ground water after that		

	from the 3 <sup>rd</sup> year onwards at peak production capacity it will be 250.0 KLD which will be sourced from Mine Sump as & when it gets developed except for drinking water which is 10 KLD.
Permission	NOC for Ground water abstraction has been obtained from CGWA vide NOC No. CGWA/NOC/MIN/ORIG/2021 /12466, dated 04.08.2021 for abstraction of fresh water 100 m <sup>3</sup> /day of fresh water and 57 m <sup>3</sup> /day for dewatering and is valid up to 03.08.2023.

(ix) Nearest village / town/ highway/railway station / water bodies:

Particular	Particular's Name	Directions
Nearest village	Mukeha, Pawaia, Dhahara, Hinauta, Chikalahi, Baraha kalan, Beli, Gaura Khurd	Falling nearby the lease area & surrounded by mine lease
Nearest Town / City	Amanganj	~ 3.5 km, West
Nearest State/National Highway	SH 10	~ 2.75 km, WSW
Nearest Railway Station	Maihar, Satna Katni and Damoh Railway Station	~ 60.5 km, - ~90 km
Nearest Water Bodies	There are few seasonal nallhas (rivulets) within the concession area which become active during monsoon period and rain water gets discharged through the nallahs to Mirhasan River flowing outside the lease area.	
	Mirhasan Nadi, Ken River Saigur Nala and Patne River	~ 4.5 km to ~9 km

(x) Presence of Environmentally Sensitive areas in the study area:

Forest Land / Protected Area / Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	PP reported that no forest land falls within the mine lease area. A letter regarding confirmation of the same has been obtained from Forest Dept., Panna, MP vide letter no. Maa Chi/2015/3609, Panna, dated 24.07.2015.
National Park	No	No National Park, Wild Life Sanctuaries, Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA) etc. within 10 km radius study area.
Wildlife Sanctuary	No	
Eco Sensitive Zone (ESZ)/ Eco-Sensitive Area (ESA)	No	
Schedule-I species	No	None
Status of Wildlife Conservation Plan	-	As no schedule I species is found, therefore, same is not applicable

(xi) Green belt/plantation details:

Proposed area for green belt/plantation	PP reported that at conceptual stage, Greenbelt along the 7.5m mine lease periphery will be covered within initial 3 years covering an area of 66.0 ha. Plantation on safety zone (36 ha along the road, 4.30 ha along the water bodies, 47.70 ha along the Habitation) will be carried out from initial year to upto the life of mine. At conceptual stage, total excavated area will be 930.05 ha and the entire area of 930.05 ha will be backfilled and rehabilitated by plantation @ 10% of 1500 nos of saplings & regrassing over the entire area.
Budget for green plant & plantation till the end of life of mine.	Rs. 7.41 crore
Budget for nursery	-
Additional information (if any)	Local and fruit bearing species will be planted in consultation with local forest officer.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	66.0 ha
50 m safety zone of nallah, roads, electric lines	Along Nallah: 4.30 Ha, Along Road: 36.0 Ha
500 m safety zones of nearest habitation villages	47.70

(xii) Baseline Details:

The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Winter Season i.e., December, 2020 to February, 2021. The Monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.

Period	December, 2020 to February, 2021				
AAQ parameters at 12 locations	Pollutant	Min, $\mu\text{g}/\text{m}^3$	Max, $\mu\text{g}/\text{m}^3$	98 %ile, $\mu\text{g}/\text{m}^3$	Standard, $\mu\text{g}/\text{m}^3$
	PM10	52.3	82.3	82.0	100
	PM2.5	25.4	43.1	43.0	60
	SO <sub>2</sub>	5.4	15.3	15.1	80
	NO <sub>x</sub>	10.0	25.9	25.8	80
AAQ modeling	Pollutant	Baseline Concentration,	Incremental Concentration,	Total GLC,	Standard

		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	
	PM10	63.2	3.86	67.06	100
	PM2.5	30.3	1.54	31.84	60
	SO2	9.0	1.13	10.13	80
	NOx	17.5	1.65	19.15	80
Noise level at 12 locations	Day Time: 52.2 to 61.8 Leq dB (A) Night Time: 41.5 to 52.5 Leq dB (A)				
Ground water quality at 11 locations	PP reported that the pH of the water samples ranged from 7.57 to 8.12 indicating slightly alkaline in nature and maximum pH was recorded at village Gunour. The observed values of parameter varies from: total hardness (306.82 to 588.78 mg/l), alkalinity (271.21 to 523.64 mg/l), total dissolved solids (519 to 1476 mg/l); however, maximum hardness & dissolved solids were found in village Gunour. The concentration of chloride was found to be (85.42 to 386.56 mg/l) and Sulphate was (69.64 to 201.56 mg/l). The concentrations of other micro and macro nutrients were also at low level i.e. nitrate (5.04 to 14.16 mg/l), calcium (75.16 to 177.75 mg/l), magnesium (28.99 to 62.90 mg/l), and iron (0.09 to 0.27 mg/l).				
Surface water quality at 5 locations	PP reported that the pH of the water bodies ranges from 7.26 to 7.48 indicating slightly alkaline in nature. Total hardness (69.87 to 197.25 mg/l), Total dissolved solids (156 to 288 mg/l), Alkalinity (81.68 to 173.40 mg/l) and conductivity (259 to 442 $\mu\text{S}/\text{cm}$ ) were found to be within standards in water samples. The COD (14.2 to 24.6 mg/l) and BOD (3.1 to 9.7 mg/l). The nutrients were also found in sufficient quantity viz. sulphate (16.37 to 48.17 mg/l), nitrate (0.86 to 2.22 mg/l), calcium (16.45 to 54.11 mg/l), magnesium (7.01 to 15.13 mg/l) indicates that the water bodies are clean. Dissolved oxygen (6.9 to 7.6 mg/l) indicated that the water bodies are safe for aquatic biodiversity. The results indicated that water sample collected from Patne River is more clean as compare to Mirhasan River, Ken River and Dam.				
Soil quality at 11 locations	PP reported that the soil samples exhibit Blackish, Brownish, Brownish Black & Blackish Brown color which indicated that the soil has high organic matter content. On the analysis of Soil samples, it was found that the organic matter in the collected samples varies from 0.74% to 0.99%. The textures of the collected soil samples found out to be Silt clay loam and clay loam which means that the soil contains 27 to 40 % of clay and 20 to 45 % of sand. All soil samples were slightly alkaline in nature having pH range from 7.77 to 8.05. The texture, alkaline nature and presence of organic matter of the soil reflects that the soil is appropriate for the plant growth. Moreover, In terms of essential macro-nutrients, it can be said that soil quality of selected locations is average for the plant growth.				
Traffic Survey	PP reported that the excavated limestone will be transported from				

	mine face to crusher by dumpers and further crushed limestone will be transported to its proposed interlinked Cement Plant via covered conveyor belt. No transportation will occur through public transport road.
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(xiii) Public Hearing (PH) Details:

Advertisement for PH with date (pl. mention name of major national daily and one regional vernacular daily newspaper)	National Level/Local Level: Star Samachar & Dainik Jagran on 19.01.2022 Dainik Bhaskar on 20.01.2022
Date of PH	24.02.2022 at 11:00 AM
Venue	Govt. High Sec. School Playground, Village: Maheba, Tehsil: Amanganj, District: Panna
Chaired by	Mr. V.S. Rai: Regional Officer, Sagar, MP Mr. J.P. Dhurve: Additional District Collector, Panna, MP
Main issues raised during PH	Land acquisition, loss of agriculture land, employment for local people, environment pollution, health issues, education for local people, infrastructure development, tree cutting, land for land, skill development, plantation in nearby areas, establishment of milk diary, promotion of medium and small scale industries, drinking water, community health centre etc...
Budget proposed for addressing issues raised during PH	Capital Cost- Rs. 4.60 crores Recurring Cost - 11.5 lakh/annum

(xiv) Rehabilitation & Resettlement:

R & R details	PP reported that the total mine lease area is 1793.59 ha, out of which 57.723 ha is Govt. land and 1735.867 ha is Private Land. According to khasra details there are 1300 families involved in total lease area, out of which 474 are project affected families (whose land to be purchased). The estimated budget of R&R has been calculated on the basis minimum cost for each village separately. On the basis of same the budget estimated for R&R Action Plan is Rs. 169.72 crore. PP will negotiate or try to pay the land cost on the basis of uniformity considering maximum cost i.e. Rs. 23.26 Lakh. After considering the same the total budget for R&R Action Plan is Rs. 272.22 Cr.
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(xv) Court case details: The Project Proponent submitted that there is no Court Cases pending against the project and/or land in which the project is proposed to be set up



(xvi) Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	PP submitted the Affidavit in an non-judicial e-stamp vide certificate no. UP57120777211706T dated 07.09.2021 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 <sup>nd</sup> August 2017 in writ Petition (civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Project Proponent submitted an Undertaking vide Letter dated 01.08.2022	PP submitted an undertaking stating that that "we have reviewed the EIA report and take full responsibility and ownership of the contents presented in the EIA report by J.M. EnviroNet Pvt. Ltd. Instructions as per MoEF&CC vide O.M. No. J-11013/41/2006-IA. II (I) dated 4th August, 2009 has been followed in the preparation of this EIA Report. We also assure that there is no litigation pending against the project and/or any direction / order passed by any Court of law against the proposed project and that for any such litigation whatsoever, the sole responsibilities will be borne by company".
Consultant submitted an Undertaking dated 01.08.2022	The Consultant submitted an undertaking to the effect that the conditions laid down in Terms of Reference prescribed by MoEF&CC, New Delhi vide letter no. J-11015/29/2020-IA.II (M) dated 17.11.2021 have been complied as per data/details provided by Project Proponent & as per Approved Modified Mining Plan along with Progressive Mine Closure Plan approved by IBM and the data submitted are factually correct.
Plagiarism Certificate checked on 01.08.2022	The Head of the Accredited Consultant Organization/ Authorized person certified that this EIA Report has been evaluated by using online software viz. Plagiarism Checker X. The report produced has been analyzed by the system and based on it, I certify that the EIA Report produce in accordance with good scientific practice.

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

S. No.	Activities	Capital Cost	Recurring Cost
A	Mitigative Measures		
1	Permanent water sprinkling arrangements for main haulage road	14	3.0
2	2 water tanker (28 KL) for water sprinkling in other roads and mining areas/activities	80	4.0
3	Pollution Control Device (Bag filter at Crusher) Equipment and its installation Cost, Operation & Maintenance	50	6.0

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4	Green belt around 7.5 m periphery covering an area of 66 ha (No. of saplings: 99,000) from initial year to upto the life of mine i.e. 28 years (Considering Rs. 198 Lakh)	198	1.0
5	Plantation / Re-grassing in backfilled area of 930.05 ha with total 139508 saplings upto the life of mine i.e. 28 years (Considering Rs. 279 Lakh)	-	9.964
6	Plantation on Safety zone (Habitation: 47.70 ha, Road: 36 ha, Nallah: 4.30 ha) with total 1,32,000 saplings from initial year to upto the life of mine i.e. 28 years (Considering Rs. 264 Lakh)	-	9.42
7	Drip irrigation system for fruit orchard (Length of drip system is 2000 m X 8 lines)	7.0	1.0
8	Retaining Wall around soil dump (L*W*D = 3900 x 0.6 x 1)	3.0	1.0
9	Garland Drain around soil dump (L*W*D = 4000 x 1.2 x 1)	2.5	0.50
10	Channelized Catch Drains around soil dump (L*W*H = 10 m x 5 m x 1 m)	2.5	0.40
11	4 nos. of Settling Tank / Sedimentation Pond (Length*Width*Depth = 8 m x 4 m x 3 m)	5.0	0.50
12	Construction of 3 nos. of Check Dams in and around 5 km area of mine boundary (@ Rs. 6 lacs per Check Dam) and its annual maintenance	18.0	1.50
Sub Total		380	38.28 4
B	Monitoring		
1	Installation of 10 Ambient Air Quality Monitoring Stations (2 online at Mine Site and 8 manually at villages: Mukeha, Pawaia, Dhahara, Hinauta, Chikalahi, Baraha kalan, Beli, Gaura Khurd and display board at Mines Main Gate	100	14.0
2	Fugitive dust emission monitoring (9 locations * monthly)	2.5	1.0
3	Pond deepening, harvesting, desilting, maintenance & ghat development works of the village ponds and other structures	25	2.0
4	Installation of 5 Piezometers along the ML periphery in the premises with Digital Level Recorder & Telemetry Raw water analysis (PZ wells) (3 times in a year)	5	1.0
5	Surface Water Quality Analysis of Nallahs (3 Samples * Half yearly) & Pond (8 Samples * Half yearly)	2.0	0.50
6	Ground water quality analysis (5 locations * 4 times in a year)	-	0.50
7	Installation of Workshop & Workshop Waste Water Quality Analysis (monthly) as well as maintenance of oil-water separators	3.0	0.50
8	Peak Particle Velocity Monitoring for nearby habitation i.e. Pawaia, Dhahara, Hinauta, Chikalahi, Baraha kalan, Beli, Gaura Khurd	5.0	1.0
9	Ambient Noise Level Monitoring (9 locations * monthly frequency)	-	1.0
10	Work Place Noise Level Monitoring (5 Locations * quarterly)	2.0	0.30

	frequency)		
11	Providing Ear muffs/plus to workers working in high noise area	1.0	0.50
Sub Total B		145.5	22.30
C	Miscellaneous		
1	Digital mapping of entire mine area once in three years (Rs. 3 Lacs once in 3 years)	-	1.0
2	Occupational Health Check-up of Mines Employees	15.0	5.0
3	Others, if any	-	2.0
Sub Total C		15.0	8.0
TOTAL (A +B+C)		540.5	68.584
D	Estimated budget for addressing the Public Hearing issues	460	11.5
TOTAL (A +B+C+D)		1000.5	800.84
		= 10 Cr	= 0.80 Cr

(xviii)Details of project cost and employment:

Particular	Budget
Total cost of EMP (Capital Cost of EMP + Capital cost of Public Hearing)	Rs 10.0 Cr
Project Cost	Rs 400 Cr
Employment	147 persons

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

The EAC on viewing the KML observed that the instant mine lease area is green field project of area 1793.59 ha (mostly agricultural land). The Project Proponent informed the EAC that the mining lease was granted after curtailing the habitation, roads, seasonal nallah, pond, electric lines etc and the mining lease area is divided into 23 blocks, out of which only 10 blocks such as Blocks-1, 2, 3, 11, 13, 14, 15, 16, 17 and 20 will be under mining and the area to be mined out will be 930.05 ha and there are no habitations and water bodies found in the mining area of 930.05 ha and 13 blocks will be non-mining zone. Further, the Project Proponent informed that at the conceptual stage, total utilized area will be 1093.85 ha and an area of 699.74 ha will remain undisturbed.

The Project Proponent also informed the EAC that the during the appraisal of Terms of Reference (ToR), the Committee was of the view that the proposed mining scheme is not acceptable, as all the sides of the 7 villages, 3-4 Village ponds; both sides of the connecting roads were proposed for mining and the Committee advised the

project proponent to fragment the lease into different phases and revise the mining plan in consultation with IBM, keeping in view of the habitations, water bodies and connecting roads, in such a way, that the sequential mining between the blocks and no islanding of village at any given point of time shall happen. Further, clear demarcation of safety barrier of not less than 100 m against the habitation and 50m against the roads and village ponds shall be left and planned for plantation/ greenbelt. The Project Proponent informed the EAC that in view of the above, Modified Mining Plan along with Progressive Mine Closure Plan got approved from Indian Bureau of Mines (IBM) dated 02.07.2021.

The EAC asked the Project Proponent whether the land has been acquired or not? The Project Proponent informed the EAC that the total mine lease area is 1793.59 ha, out of which Private land is 1735.867 ha and Govt. land is 57.723 ha and land acquisition of 1093.85 ha is under process and will be done in phased manner. The mining will begin from west to east direction. The EAC asked the Project Proponent to show the villages in the KML file. The Project Proponent shown the 7 villages in the KML file and informed the EAC that initially 50m safety zone has been left as no mining zone and as per the advice of the EAC, the safety zone has been increased to 150m and will be maintained as no mining zone and 300m as no blasting zone and accordingly modified mining plan was approved from IBM on 02.07.2021. Further, the Project Proponent informed that the blasting will be carried out only once per day.

The EAC also asked the Project Proponent to show the environmental sensitivity in the study area of 10 km radius in the KML file. The Project Proponent informed the EAC that there are three forest such as Bilghari PF (~ 4.0 km, NE), Gunaur PF (~ 7.0 km, ENE) and Rampur PF (~ 9.0 km, NW) found in the 10 km radius of the study area and shown the same in the KML file. Proponent also informed the EAC that the predominant wind direction is from North to South. The EAC also asked the Project Proponent about the distance of the Panna Tiger Reserve from the mine lease area and its buffer zone. The Project Proponent informed the EAC that the aerielly Panna Tiger Reserve is located at a distance of 30 km, NW from the mine lease area. Further, the Project Proponent informed that there is no National Park, Wildlife Sanctuary, Wildlife Corridor within 10 km radius of the study area as per Forest Department letter dated 24.07.2015. The EAC opined that the Project needs to submit the KML file by overlapping the KML file of the mine lease area with the KML file available from the National Tiger Conservation Authority. The EAC advised the Project Proponent to refer the report of Wildlife Institute of India with respect to Tiger distribution if any in the study area. Further, the EAC advised the Project Proponent to furnish the comments from the National Tiger Conservation Authority and also to submit the letter from the Chief Wildlife Warden clearly indicating the distance of core and buffer zone of Panna Tiger

Reserve from the mine lease boundary as well as any concern about movement of tigers from Panna Tiger Reserve to forests of South Panna Forest Division and then to Bandhavgarh Tiger Reserve.

The EAC asked the Project Proponent why the location of the crusher has been fixed in two locations. The Project Proponent informed the EAC that the 1600 TPH of crusher will be initially installed near the mine lease periphery in Block-1 and later will be shifted to Block-15 in conceptual period i.e., from west to east in view of environment protection and sequential mining. The EAC also asked the Project Proponent about the capacity of the cement plant and distance of the cement plant from the mine lease area? Project Proponent informed that the capacity of the cement plant is 2.5 MTPA and aerial distance is about 1.5 km and a conveyor belt of 3.5 km will be installed for transportation of crushed limestone.

The EAC asked the Project Proponent about the area of the mineralized zone in the mine lease area. The Project Proponent informed the EAC that the detailed exploration has not been done yet and the same will be carried out during the five-year plan period. The EAC was of the view that the proposal of backfilling seems to be in convincing. Hence, the EAC asked the Project Proponent to revisit and justify the proposal of backfilling over an area of 930.05 ha with actual data based on sequential mining.

The EAC asked the Project Proponent about the details of mode of payment of compensation to the Project Affected Persons. Project Proponent informed the EAC that the 40% will be Lump-sum payment, 30% of payment in the form of Fixed Deposit and 30% of payment in the form of Annuity. The budget earmarked for R&R Action Plan is Rs. 272.22 Cr. Further, the Project Proponent informed the EAC the current practices has been/will be carried out continuously on non-purchased land i.e. 699.74 ha. The EAC asked the Project Proponent to submit the undertaking in this regard and the Project Proponent agreed for the same.

The EAC noted that the Project Proponent has not carried out the cumulative impact assessment. The EAC advised the Project Proponent to include the scenario of pollution to be generated at the Cement Plant and accordingly to revise the air quality modeling.

The EAC asked about the plantation plan to be carried out in seven villages. The Project Proponent informed the EAC that the plantation will be carried out over an area of 47.5 ha all along the seven villages. The EAC asked the Project Proponent to submit the action plan for development of plantation/greenbelt along the 7.5m mine lease

periphery (66.0 ha), safety zone along the road (36.0 ha), water bodies (4.30 ha), habitation (47.70 ha). The EAC also asked the project proponent to clearly mention the area to be covered in the seven villages separately, backfilled area along with time schedule.

The EAC asked the Project Proponent whether there is any presence of ponds in the mine lease area. The Project Proponent informed the EAC that there is no pond within the mine lease area but ponds are found adjacent in the mine lease area. The EAC opined that the Project Proponent needs to develop the pond near the villages and use the surplus water so that it will be available for villagers. The EAC advised the Project Proponent to submit the action plan for developing new ponds near the villages and along with the budget. The EAC was of the view that the Project Proponent shall ensure that the activities proposed under public hearing action and activities proposed under Environmental Management Plan (EMP) should not be similar. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project needs to submit the KML file by overlapping the KML file of the mine lease area with the KML file available from the National Tiger Conservation Authority website.
- ii. The Project Proponent needs to refer the report prepared by Wildlife Institute of India/Madhya Pradesh State Biodiversity Board with respect to Tiger distribution if any in the study area and highlight the same in the EIA/EMP report.
- iii. The Project Proponent needs to furnish the comments from the National Tiger Conservation Authority and also need to submit the letter from the Chief Wildlife Warden clearly indicating the distance of core and buffer zone of Panna Tiger Reserve from the mine lease boundary as well as any concern about movement of tigers from Panna Tiger Reserve to forests of South Panna Forest Division and then to Bandhavgarh Tiger Reserve.
- iv. The Project Proponent needs to include the scenario of pollution to be generated at the Cement Plant and accordingly needs to revise the air quality modeling and incorporate the same in the EIA/EMP report. PP should indicate the capacity considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.

- v. The Project Proponent needs to submit the action plan for installing Continuous Ambient Air Quality Monitoring Station (CAAQMS).
- vi. The Project Proponent needs to revisit and justify the proposal of backfilling over an area of 930.05 ha with actual data based on sequential mining.
- vii. The Project Proponent needs to submit the action plan for developing new ponds near the villages and along with the budget in such a way that the surplus water shall be made available for villagers. Accordingly, the Project Proponent shall revise the budget of public hearing.
- viii. The Project Proponent needs to submit the action plan for development of plantation/greenbelt along the 7.5m mine lease periphery (66.0 ha), safety zone along the road (36.0 ha), water bodies (4.30 ha), habitation (47.70 ha). The Project Proponent needs to clearly mention the area to be covered, saplings to be planted in the seven villages separately in the safety zone of 150m and backfilled area along with the timeline.
- ix. The Project Proponent needs to submit the letter from the Competent Authority with respect to flora and fauna in the study area of 10km radius and shall indicate the Schedule-I species if any found in the study area.
- x. The Project Proponent needs to submit an undertaking stating that the current practices will be carried out continuously on non-purchased land i.e. 699.74 ha. as informed before the EAC during the meeting.
- xi. The EAC was of the view that the Project Proponent shall ensure that the activities proposed under public hearing action and activities proposed under Environmental Management Plan (EMP) should not be similar.

**1.2 Dongargaon Limestone Mine of M/s RCCPL Private Limited for mining of Limestone with Total Excavation of 1.52 Million TPA [Limestone (ROM) – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA] in the mine lease area of 252.36 Ha, located at Villages Dongargaon, Dahigaon and Wegaon, Tehsil: Wani & Maregaon, District – Yavatmal, Maharashtra - [F.No: IA-J-11015/33/2022-IA-II(NCM), Proposal No: IA/MH/MIN/289146/2022, Consultant: Enkay Enviro Services Private Limited] - Terms of Reference (ToR)**

The instant proposal is for grant of Terms of Reference for mining of Limestone in Dongargaon Limestone Mine with Total Excavation of 1.52 Million TPA [Limestone (ROM) – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA] in the mine

lease area of 252.36 Ha, located at Villages Dongargaon, Dahigaon and Wegaon, Tehsil: Wani & Maregaon, District – Yavatmal, Maharashtra. The mine lease area is located between Latitude: 20°2'24.76"N to 20°3'43.16"N and Longitude: 78°50'22.24"E to 78° 51' 44.12"E. The mine lease area falls under the Survey of India Toposheet No: 55L/16 and falls in Seismic Zone – II.

2. The Project Proponent has made an online application vide proposal no: A/MH/MIN/289146/2022 dated 18.08.2022 and submitted Form-1 and Prefeasibility report under the provisions of the EIA Notification, 2006. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.

3. The details of the project as ascertained from the document submitted by the Project Proponent are mentioned below:

i. Details of Mine Lease:

S. No	Lease Particulars	Date of Grant	Mineral	Mine Lease Area, Ha	Period	Granted by
1	Letter of Intent for grant of mining lease in pursuant to Rule 10 (2) of the Mineral (Auction) Rules, 2015 and this Letter of Intent is valid for a period of 3 years from the date of its issuance	20.05.2022	Limestone	252.36	50 years	Govt. of Maharashtra

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

Private Agriculture land	252.36 Ha
Government land	Nil
Total Mine lease area (MLA)	252.36 Ha

iii. Details of Mining Plan:



Minutes of 3<sup>rd</sup> EAC (Non-Coal Mining) meeting held on 5<sup>th</sup> September, 2022

Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Letter No.	YTL/LST/MPLN-02/2022-NGP		
	Date	12.08.2022		
	Mineral	Limestone		
	Mine lease area	252.36 Ha		
Mining Parameters	Quantitative Description			
Method of Mining	Opencast mechanized mining			
Geological Reserves	12.95 Million Tonnes			
Mineable Reserves	5.36 Million Tonnes			
Life of mine	8 years			
Bench Height	5 m			
Bench Width	15 m			
Individual bench slope	80°			
Overall pit slope	35°			
Drilling/Blasting	Project Proponent reported that 115 mm dia and 5 m (+10% subgrade drilling) will be drilled with compressed-air-operated DTH drills. The blasting will be done by ANFO/SME/Slurry as column charge and slurry /cast booster explosive as booster charge. Controlled blasting will be practiced by using Nonel detonators.			
Transportation details	Project Proponent submitted that the ROM will be transported to Mukutban mine by road (about 55 km, S) and then the crushed limestone will be transported to cement Plant by Over Land Belt Conveyor (OLBC-1.9 km).			
Dumpers capacity	25-30 tonnes			
RoM output size	400 mm			
Generation and Management of Soil/Alluvium and Waste	Generation of Soil/Alluvium and Waste (Conceptual Period)			
	S. No	Particulars	Quantity (Million Tonne)	Management/ Disposal
	1	Soil/Alluvium	0.19	Stacking at earmarked place and utilized for plantation
	2	Waste/ Overburden	2.26	Stacking at earmarked place and utilized for mine road/ramp development/ back filling
Final mine void	168 AMSL (49.0 m BGL max.)			
Ground water level	Water level Pre monsoon-187.5 AMSL (29.5 m bgl) Water Level:- Post monsoon 191.5 AMSL (25.5 m bgl)			
Intersection of groundwater table	Project Proponent reported that ground water will be intersected during 5 <sup>th</sup> year as mine pit will reach 190 AMSL			

	during that year.
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iv. Water requirement:

Total water requirement	115.0 KLD		Domestic	4.0 KLD
	Fresh	105.6 KLD	Dust Suppression	80.0 KLD
	Treated	9.4 KLD	Plantation	23.0 KLD
			Workshop	8.0 KLD
Source	Ground water during initial years of operation and later on water stored in mine pits will also be utilised			
Permission	Project Proponent submitted that NOC from CGWA is in process.			

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

Particulars	Particular's Name	Distance & Directions
Major settlement	Wani	8.60 km, E
Tehsil HQ	Wani Maregaon	8.60 km, E 5.50 km, W
Nearest Village	Dongargaon	0.40 km, N (From lease boundary) 0.59 km, N (From mine working pit)
Nearest Town	Wani	8.60 km, E
Nearest Highway	NH-930	4.0 km, N
Nearest Railway station	Wani	10.4 km, ENE
Water bodies	Nirguda Nala	Adjoining, N (From lease boundary) 0.86 km, N (From mine working pit)

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

Forest Land/Protected Area/ Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	Yes/ No	Details of Certificate/letter/Remarks								
Forest Land	No	Project Proponent submitted that the Certificate/letter in this regard will be submitted along with the Final EIA report.								
Wildlife Sanctuary	No									
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No									
		<table border="1"> <thead> <tr> <th>Name of Forest</th> <th>Distance and Direction</th> </tr> </thead> <tbody> <tr> <td align="center" colspan="2">Reserve Forest (RF)</td> </tr> <tr> <td>Borgaon R.F.</td> <td>3.49km, SE</td> </tr> <tr> <td>Ghonsa R.F.</td> <td>4.83km, SSW</td> </tr> </tbody> </table>	Name of Forest	Distance and Direction	Reserve Forest (RF)		Borgaon R.F.	3.49km, SE	Ghonsa R.F.	4.83km, SSW
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Reserve Forest (RF)										
Borgaon R.F.	3.49km, SE									
Ghonsa R.F.	4.83km, SSW									

Additional information (if any)	MaregaonRamna R.F.	4.86km, N
	Maregaon R.F.	5.41km, N
	Margaon R.F.	6.37km, N
	Suknegaon R.F.	6.66km, SSE
	Manki R.F.	7.04km, SE
	Pendhari R.F.	8.61km, WSW
	Petur R.F.	8.67km, SE
	Bhivkund R.F.	8.77km, SW
	Phiski R.F.	9.90 km, N
	Protected Forest (PF)	
	P. F. near village (N/V) Dongargaon	0.72 km, NE
	P.F. N/V Borda	2.94 km, S
	P. F. N/V Kegaon	3.33 km, WSW
	P. F. N/V Gothani	5.06 km, SW
	P.F. N/V Surla	8.85 km, SW
Lakhapur P.F.	9.71 km, NNE	

vii. Green belt/plantation details:

Proposed area for green belt/plantation	38.94 ha
Budget for green plant & plantation till the end of life of mine.	Rs. 0.81 Cr.
Budget for nursery	
Particulars for Green belt/plantation	Area covered (in Ha)
Along Road, Near Soil & OB Stack	14.16 ha
Dumps Area	6.84 ha
Backfilled area	12.80 ha
Two uppermost benches	5.14 ha
Total no. of saplings proposed to plant	39,210 No.s

viii. Rehabilitation & Resettlement (R&R):

R & R details	Project Proponent submitted that R&R study will be covered during EIA study
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ix. Court case details:

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

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an Affidavit in a non-judicial stamp paper of Rs 100 bearing 17AA 928904 dated 09.08.2022 stating that this mine will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 <sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.
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xi. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Rs 48.01 Cr
Employment	92 persons

#### **4. Observation and Recommendation of the Committee:**

The EAC on viewing the KML file noted that the entire mine lease area of 252.36 ha is an agriculture land. The Project Proponent informed the EAC that Nurguda Nala is flowing adjacent to the mine lease area, Village Dongargaon is located at a distance of 0.40 km, N from the mine lease area and a village road from Wegaon to Wani is passing through the mine lease area. Project Proponent also informed that HT line is traversing on the southern direction in the mine lease area. The Project Proponent also informed the EAC that the Wardha River is located at a distance of 7.95 km, SW from the mine lease area. Further, the Project Proponent informed the EAC that the details of land acquisition will be detailed at the time of appraisal of EC with comprehensive R&R study and also informed that during 1<sup>st</sup> year no mineral production will be undertaken and only land purchase & obtaining permissions will be undertaken. The EAC asked the Project Proponent to submit the cost benefit analysis study comparing the agricultural production and mineral production.

The EAC asked the Project Proponent whether the mined out Dolomite will be dumped within the mine lease area or will be sold out? The Project Proponent informed the EAC that the Dolomite/Dolomitic Limestone will be removed as Overburden and will be stacked within the mine lease area and will not be sold out without prior permission from Ministry. The EAC asked the Project Proponent to submit the undertaking in this regard at the time of appraisal of EC.

The Project Proponent informed the EAC that the ROM will be transported to Mukutban mine by road about 55 km, S and then the crushed limestone will be transported to cement Plant by Over Land Belt Conveyor (OLBC-1.9 km). The EAC advised the Project Proponent to undertake the carrying capacity of the road and also to ensure that the transportation of mineral needs to bypass the village road.

The EAC noted that the total mine lease area is 252.36 ha, out of which Project Proponent proposed to excavate only 23.95 ha and an area of 206.41 ha will remain undisturbed. The EAC was of the view that why an area of 252.36 ha is required? The

Project Proponent informed the EAC that the exploration will be carried out in the 1<sup>st</sup> year and depending on the exploration the area may subject to change. The EAC advised the Project Proponent to clearly mention the area to be excavated at the conceptual stage that may change depending on the exploration and accordingly the Project Proponent shall revise the mining plan.

Based on the above discussions, the EAC **recommended** the proposal for grant of Terms of Reference for mining of Limestone in Dongargaon Limestone Mine of M/s RCCPL Private Limited with Total Excavation of 1.52 Million TPA [Limestone (ROM) – 0.9 Million TPA, OB – 0.56 Million TPA & Soil – 0.06 Million TPA] in the mine lease area of 252.36 Ha, located at Villages Dongargaon, Dahigaon and Wegaon, Tehsil: Wani & Maregaon, District – Yavatmal, Maharashtra for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects:-

- i. In view of the prime agricultural land proposed under mining lease area, the Project Proponent needs to submit the Cost Benefit analysis comparing the current agricultural production and annual turnover including the cost and the benefits drawn by the local villages vis-a-vis the mineral cost and beneficiaries.
- ii. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air and noise pollution.
- iii. The Project Proponent needs to monitor the ambient air quality and noise level at Village Dongargaon (0.40 km, N), Kishori pan sentar School (Adjacent, W), predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- iv. The Project Proponent needs to carry out the cumulative impact assessment by considering all the mining activity including the transport scenario of the mines in the study area and should indicate the capacity of each mine considered for predication of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.
- v. The Project Proponent needs to submit the preventive measures to be taken for protection of Kishori pan sentar School found adjacent on the western side of the mine lease area. Proponent also needs to submit the total strength of the school,

timings of the school and the schedule of blasting, safety distance, controlled blasting techniques and schedule of monitoring of blasting.

- vi. The Project Proponent needs to submit the measures to be taken for protection of Nirguda Nala found adjacent to the mine lease area in the northern direction *inter alia* including the protection bund; plantation on the embankment along with the implementation time line and budgetary provisions.
- vii. The Project Proponent needs to carry out the detailed carrying capacity of the road w.r.t to i) traffic and ii) strength of road for the transportation of minerals along with the map showing the transportation route. The Project Proponent shall ensure that the transportation of minerals should not bypass the village road.
- viii. The Project Proponent needs to submit the time bound action plan for carrying out the plantation on mine lease boundary, safety zone plantation, dump area, backfilled area, two uppermost benches etc. clearly mentioning the area to be planted, spacing, no. of saplings to be planted and species to be planted, along with timeline and budget. An undertaking in this regard needs to be submitted by the Project Proponent.
- ix. 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.
- x. The Project Proponent shall carry out the assessment of impact due to the proposed project as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP. The project proponent shall conduct hydrological study for projects involving intersection of ground water table as per the guidelines issued by the Central Ground Water Authority from time to time and submit the same as a part of the EIA/EMP.
- xi. The Project Proponent shall explore the possibility of reduction of specific water requirement by optimization / technology up gradation, etc. The efforts shall be delineated in the EIA/EMP.
- xii. 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.

- xiii. The Project Proponent needs to submit the detailed R&R plan covering all the components viz. number of Project Affected Families (PAF) and details of the land owned by them, break up of total compensation to be paid including method of calculation including the sources/references adopted and mode of payment etc. PP need to submit the plan for Socio economic development of the neighbourhood habitats based on the need based survey along with the time bound action plan. PP also needs to submit the possession certificate and timeline for acquiring the land at the time of appraisal of EC.
- xiv. The Project Proponent needs to submit an undertaking that the Dolomite/Dolomitic Limestone will be removed as Overburden will be stacked within the mine lease area and will not be sold out without prior permission from the Ministry, as informed before the EAC during the meeting at the time of EC appraisal.
- xv. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

**1.3 Aniali Rana Bordi Limestone mine of M/s Tata Chemicals Limited for expansion in Limestone production capacity from 14,000 TPA to 1,75,000 TPA in the mine lease area of 12.27 ha, located at Village: Aniali, Tehsil: Rananav, District: Porbandar, State: Gujarat – [F.No: J-11015/304/2012-IA.II(M), Proposal No: IA/GJ/MIN/213741/2017; Consultant: In Situ Enviro Care] – Reconsideration of Environmental Clearance**

The instant proposal is for reconsideration of environmental clearance for mining of Limestone in Aniali Rana Bordi Limestone mine of M/s Tata Chemicals Limited for expansion in Limestone production capacity from 14,000 TPA to 1,75,000 TPA in the mine lease area of 12.27 ha, located at Village: Aniali, Tehsil: Rananav, District: Porbandar, Gujarat. The mine lease area is located between Latitude 21°42'4.535"N to 21°42'24.163"N and Longitude: 69°49' 23.698"E to 69° 49' 31.769"E. The mine lease area falls under the Survey of India Toposheet No: 207/P and falls in Seismic zone-III.

2. The Project Proponent has made an online application vide proposal no: IA/GJ/MIN/213741/2017 dated 03.06.2021 and submitted Form 2 and EIA report under the provisions of the EIA Notification, 2006. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals and attracts the general conditions as the Barda Wildlife Sanctuary is located at a distance of 4.02 km, NW from the mine lease area and 112.21 meters from ESZ and falls under Category "A" and appraised at the Central level.

3. Details of Previous EAC meetings:

- i. The proposal was initially considered in the 32<sup>nd</sup> EAC Meeting held during 28<sup>th</sup> June and 1<sup>st</sup> July 2021 wherein the Project Proponent vide e-mail dated 26.06.2021 sought deferment of the proposal due to medical reasons. The annexures uploaded on PARIVESH portal with the EIA/EMP report is not legible due to which many important documents were unable to be examined. Also, a sensitive matter of Barda Wildlife Sanctuary is involved. Therefore, the Committee deferred the proposal.
- ii. Again, the proposal was considered in the 34<sup>th</sup> EAC Meeting held during 27<sup>th</sup> to 30<sup>th</sup> July 2021 wherein the Committee deferred the proposal for want of requisite information. The Project Proponent submitted the information on 14.10.2021 in PARIVESH.
- iii. Accordingly, the proposal was reconsidered in the 41<sup>st</sup> EAC (Non-Coal Mining) Meeting held during 15<sup>th</sup> -16<sup>th</sup> November and 18<sup>th</sup> November, 2021 wherein the Committee noted that the project proponent submitted the certified compliance report dated 08.08.2019. The Committee was of the view that project proponent must submit the latest certified compliance report for appraisal for Environmental Clearance. Therefore, the Committee deferred the proposal due to want of additional information. The Project Proponent submitted the information on 30.03.2022 in PARIVESH.
- iv. Then, the proposal was reconsidered in the 49<sup>th</sup> EAC meeting held during 19<sup>th</sup> to 21<sup>st</sup> April, 2022. After detailed presentation made by the project proponent and the consultant, the Committee noted that while preparing the Wildlife Conservation Plan, the project proponent has mixed the EMP budget in the budget prepared for Wildlife Conservation Plan. With reference to the Wildlife Conservation Plan (Table 6.5), the project proponent mentioned the components such as drilling, blasting and excavation of minerals (item no. 1) needs to be excluded from the plan and this should be a part of EMP. As per item no. 2, sizing, loading/unloading, it was mentioned about plantation, maintenance of equipment's, which should be the part of EMP. Post mining activities mentioned in item no. 3 should be mentioned under EMP at the closure plan as it involves creation of water reservoir in the mining pit. The utility of the water reservoir needs to be mentioned to benefit the people around as well as ground water recharge. The item no. 4 which was mentioned for wildlife was the only point that pertained to Wildlife Conservation Plan. The plantation mentioned in the budget also should be a part of EMP. The project proponent had not delineated the budget for EMP for public concerns. Three-year budget with capital investment and recurring expenses must be submitted. The ADS reply submitted by the project proponent on 30.03.2022 was not satisfactory. Therefore, the Committee deferred the proposal due to want of the requisite information. The Project Proponent submitted the information vide letter dated 27.07.2022 in PARIVESH



on 03.08.2022 and accordingly the proposal was reconsidered in the 3<sup>rd</sup> EAC (Non-Coal Mining) Meeting held during 5<sup>th</sup> September, 2022.

Based on observation of EAC and the compliance of observation of EAC made by the Project Proponent are detailed below:

S. No	Observation of EAC	Reply by Project Proponent			
1	The project proponent needs to submit the EMP budget separately into the capital investment and recurring cost for mining activities including transportation, quarrying, and noise and air pollution control.	The Project Proponent submitted the EMP budget separately into the capital investment and recurring cost for mining activities including transportation, quarrying, and noise and air pollution control.			
		Particulars	Approximate Capital cost (Rs. In Lacs)	Approximate recurring cost per annum (Rs. in Lacs)	Basis for cost estimates
		Mining activities including transportation (Covering of mineral in trucks, Wheel washing). Regular Dust Suppression on haul road	7.0	3.30	Capital cost include the cost of tanker, tarpaulins, arrangement for wheel washing area with sprinklers and recurring cost include the purchase of water
		Air quality monitoring	-	0.5	As in mining lease there are no any stacks hence capital cost is nil. Recurring cost would include cost of monitoring of ambient air quality in the mining lease season wise
		Water quality control	-	0.5	There are no treatment plants so capital cost for water pollution control is nil. While TCL will

				be monitoring tube well	
		Noise abatement	-	0.3	Recurring cost includes monitoring cost of noise measurement at different locations.
		Green belt development	1.5	3.0	Capital cost includes a plant cost @100 Rs. and wire fencing of about 90 m recurring cost includes cost
		Total	8.50	7.60	Total capital cost for EMP is Rs. 8.50 lakhs and recurring cost per year is Rs. 7.60 lakhs.
2	The project proponent needs to submit the revised EMP budget for public concerns indicating plans for environment as well as plantation in the buffer zone. Three-year budget with capital investment and recurring expenses must be submitted.	The Project Proponent submitted the revised EMP budget for public concerns indicating plans for environment as well as plantation in the buffer zone with the timeline of three-year along with capital investment and recurring expenses. PP also submitted that the total capital cost for revised EMP is Rs. 5.40 lakhs and recurring cost per year is Rs. 3.45 lakhs.			
3	The project proponent needs to submit the revised Conservation plan focusing more on wildlife including the water body creation and supporting activities.	The Project Proponent submitted the revised Wildlife Conservation plan approved by the Office of the Principal Chief Conservator of forests, Gandhinagar, Gujarat vide letter no.: WLP/32/C/417-420/2022-23 Dated 11.07.2022 with the budget of Rs 35.0 Lakhs for 5 years for construction of Water hole for Animals in Naliadhar RF region - 3 Nos. with Solar panel (Rs 15.0 Lakhs), supply monthly 3 water tankers trips of 13 KL (or as per requirement)(Rs 7.0 Lakhs), watch tower for Fire prevention inspection in Naliadhar RF - 2 Nos (Rs 10.0 Lakhs) and Soil and water conservation structures made with check walls/Gabian wall structure (Rs 3.0 Lakhs).			
4	There are three mines	Project Proponent submitted that the plantation has been			

together that are owned by M/s TATA Chemicals Limited. Plantation as seen through remote imagery is not adequate. Action Plan needs to be submitted for creating peripheral plantation as well as plantation at the mined out area and six monthly compliance report needs to be submitted.

done around all three mine leases from year 2017 -18 onwards which is a continuing process. Total number of plants planted for all three mine lease is 11,853 over an area of 8.25 Ha (cumulative). The plantation will be increased in future as well in phase wise manner. PP also submitted the plantation details carried out in all three mine as mentioned below:

Lease	Aniali 12.27 ha		Aniali 21.04 ha		Aniali 16.21 ha	
	Plants	Area (ht.)	Plants	Area (ht.)	Plants	Area (ht.)
2015-16	0	0	0	0	0	0
2016-17	0	0	0	0	0	0
2017-18	200	0.2	300	0.4	200	0.2
2018-19	335	0.3	1185	0.9	170	0.2
2019-20	204	0.1	1540	0.85	735	0.6
2020-21	285	0.2	770	0.5	300	0.2
2021-22	499	0.3	2900	2.1	600	0.3
2022-23	280	0.2	1050	0.7	300	
Total	1803	1.3	7745	5.45	2305	1.5

PP submitted the letter from the Office of the Deputy Conservator of Forest, Social Forestry Division, Devbhumi Dwarka, vide letter dated 15.09.2021 stating that M/s. Tata Chemicals Ltd. has undertaken Afforestation activity under guidance and collaboration with Gujarat forest department (Social forestry) for Aniali Limestone Mines, Lease Area 21.04 Hecter. Survey No. 207/P, Village - Aniali, Taluka Ranavav, Dist. Porbandar (Gujarat.) during the period 2017-22, 1,674 no.s of saplings have been planted inside the mine lease area and 5,021 no.s of saplings have been planted adjoining outside mine lease area over an area of 4.75 ha with survival rate of 88 %.

PP also submitted the letter from the Office of the Deputy Conservator of Forest, Social Forestry Division, Devbhumi Dwarka, vide letter dated 15.09.2021 stating that M/s. Tata Chemicals Ltd. has undertaken Afforestation activity under guidance and collaboration with Gujarat forest department (Social forestry) for Aniali Limestone Mines, Lease Area 12.27 Hecter. Survey No. 207/P, Village - Aniali, Taluka Ranavav, Dist. Porbandar (Gujarat.) during the period 2017-22, 485 no.s of saplings have been planted inside the mine lease area and 1,038 no.s of saplings have been planted adjoining outside mine lease area over an area of 1.10 ha with survival rate of 91 %.

		Integrated Regional Office, Gandhinagar during the site visit on 29.12.2021 observed that the green belt of nearly optimum width was seen during site inspection. A well-established pole with good growth potential were planted all around except at few places. The plantation work is under progress. The development of green belt seems satisfactory and it can be construed that in upcoming time the entire mining area will be surrounded with optimum width of green belt. In view of the above, and as per site inspection the condition is considered as partly complied.
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4. The details of the project as ascertained from the document submitted by the Project Proponent are mentioned below:

i. The details of the previous Environmental Clearance (EC) are furnished as below:

Date of application	File No./ Proposal No	Consideration	Details	Date of accord
21.08.2014	J-11015/ 304/2012- IA.II(M)  IA/GJ/MIN/ 24179/2014	March 20-21, 2014  October 27- 28, 2014  May 27-29, 2015	Environmental Clearance of M/s Tata Chemicals Ltd. for Aniali Limestone mine with production capacity of 0.014 million TPA (ROM) of limestone in the mine lease area of 12.27ha, located at survey no. 207/p, village-Aniali, Taluka-Ranavav, District Porbandar, Gujarat	27.07.2015
11.12.2019	J-11015/ 304/2012- IA.II(M)  IA/GJ/MIN/ 126699/2019	30-31, January, 2020  9-11 December, 2020	Amendment in Environmental Clearance to remove the specific condition no. (ii) mentioned in the EC letter no. J-11015/304/2012-IA.II(M) dated 27.07.2015 that <i>"Environmental Clearance is subject to obtaining clearance under the wildlife (Protection) Act, 1972 from the competent authority as it is applicable to this project"</i>	03.02.2021

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

Date of	File No./	Consideration	Details	Date of
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application	Proposal No			accord
31.10.2017	J-11015/ 100/2018- IA.II(M)  IA/GJ/MIN/ 70670/2017	28- 29 September- 2018	Terms of Reference (ToR) for Aniali Rana Bordi Limestone mine with production capacity of 1,75,000 TPA by M/s Tata Chemicals Limited, located at Village: Aniali, Tehsil: Rananlv, District: Porbandar, State: Gujarat (MLA: 12.27 ha)	09.10.2018

iii. Details of Mine lease:

- a. The Project Proponent submitted that the initially the mining lease for Limestone was granted in name of M/s TATA Chemicals Limited by Government of Gujarat, Industries, Mines & Power Department, Gandhinagar vide order no MCR-1565/13876/CHH dated 07.07.1966 over an area of 12.27 hectares and the mine lease deed was executed on 23.12.1966 for a period of 20 years i.e., till 22.12.1986.
- b. The Project Proponent has applied for 1<sup>st</sup> renewal of mine lease on 02.09.1985 and the State Govt. rejected the renewal application on 14.05.1987. Then, the Project Proponent filed court case in Hon'ble High Court of Gujarat against rejection of renewal application and the Hon'ble High Court of Gujarat gave its decision in favor of the company to State Government for renewal of lease. 1<sup>st</sup> renewal of mine lease was granted vide order no. MCR-1585-(T-43)-4266-CHH, dated 22.11.2004 and the same was expired on 22.12.2006.
- c. Then, the Project Proponent has applied for 2<sup>nd</sup> renewal of mine lease vide letter no. AW/G/1409/2005 dated 17.11.2005.
- d. The Government of Gujarat, Industries and Mines Department vide Lr no. MCR/1565/13876-CHH, New Sachivalaya, Gandhinagar dated 02.02.2018 have extended the lease period upto 31.03.2030.

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

Private land	--
Government Waste land	12.27 Ha
Total Mining lease area (MLA)	12.27 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	--

v. Mining plan details:

Minutes of 3<sup>rd</sup> EAC (Non-Coal Mining) meeting held on 5<sup>th</sup> September, 2022

Mining Plan approved by Indian Bureau of Mines	Letter No.	682(4)(1)/MP/320/2020-21-GNR/297
	Date	18.02.2021
	Validity	2026
Mining Parameters	Quantitative Description	
Method of Mining	Open cast method (using drilling and blasting)	
Life of mine	5 years	
Bench Height	5 m	
Bench Width	>5 m	
Overall pit slope	The edge of excavation shall be adequately sloped and secured so as to prevent danger of sliding as per the regulation 106 of the Metalliferous Mines Regulation, 1961. The slope of each bench will be kept around 80 <sup>o</sup>	
Drilling/Blasting	Occasional adoption of drilling and blasting to give shattering effect to hard strata. Project Proponent submitted that necessary permission has been already obtained from the DGMS for use of drilling and blasting system.	
Transportation details	The Limestone will be transported from mine site to Soda Ash and Cement Plant located at Mithapur.	
Dumper's capacity	17 Tonne	

vi. Water requirement:

Total water requirement	10.0 KLD		Drinking & Domestic	2.0 KLD
	Fresh water	10.0 KLD	Plantation	4.0 KLD
	Treated water	-	Dust suppression	4.0 KLD
Source	Ground Water			
Permission	The Project Proponent submitted the Groundwater clearance obtained from the Central Ground Water Authority (CGWA) vide Lr No. 21-4(861)/WCR/CGWA/2011-947 dt: 27 July 2011 stating that the project falls under semi-critical category as per the ground water assessment carried out by Central Ground Water Board. Since, the total requirement of ground water is 10 m <sup>3</sup> /day, NOC is not required for ground water withdrawal from Central Ground Water Authority. However, to neutralize the adverse impact of ground water withdrawal that may arise on a long term basis, the industry/project is advised to undertake the following measures that the Groundwater withdrawal shall not exceed the proposed quantity of 10 m <sup>3</sup> /day.			

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

Particulars	Particular's Name	Distance & Directions
Village	Daulatgadh	~1.6 km, NE

Town	Ranavav	~8.0 km, SW
Highway	NH-8B SH-27	~4.89 km, S ~4.50 km, W
Railway Station	Jam Sakhpur Railway Station Ranavav Railway Station	~4.81 km, N ~10 km, W
Water bodies	DhangvaNadi	~2.19 km, N
	BileshwariNadi	~5.60 km, NE
	MinsarNadi	~5.25 km, E
	Khambhala reservoir	~7.33 km, NW
	Fodara reservoir	~9.75 km, NW

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

Forest Area/Environmental Zone	Land/Protected Area/Environmental Sensitivity	Yes/No	Details of Certificate/letter/Remarks								
Forest Land		No	Project Proponent reported that the Forest land is not involved in the mine lease area as per approved mine plan and land use map of the project site. The map duly authenticated by District Conservator of Forest, Porbandar Division showing distance of Barda WLS from the mine lease boundary also shows that the project site is not present in the forest area.								
National Park		No	Project Proponent submitted that the Barda wildlife sanctuary is located at a distance of 4.02km, NW from the mine lease area and 112.21 meters from ESZ. PP also submitted the map duly authenticated by District Conservator of Forest, Porbandar Division showing the distance of Barda WLS from the mine lease boundary. Further, PP submitted that Mokarsagar Bird Sanctuary is located at a distance of approximately 13.45 km, SW from the mine lease area.								
Wildlife Sanctuary		Yes									
Additional information (if any)			<table border="1"> <thead> <tr> <th>Name of Forest</th> <th>Distance and Direction</th> </tr> </thead> <tbody> <tr> <td>Naliyadhar Reserve Forest</td> <td>~0.010 km, S</td> </tr> <tr> <td>Jambuda Reserve Forest</td> <td>~2.88 km, N</td> </tr> <tr> <td>Khageshri Reserve Forest</td> <td>~7.85 km, E</td> </tr> </tbody> </table>	Name of Forest	Distance and Direction	Naliyadhar Reserve Forest	~0.010 km, S	Jambuda Reserve Forest	~2.88 km, N	Khageshri Reserve Forest	~7.85 km, E
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Khageshri Reserve Forest	~7.85 km, E										
Schedule-1 species	Yes/No	Details of Certificate/letter/Remarks									

Schedule-I species	Yes	Indian Peafowl and Leopard
Wildlife conservation plan	Yes	The Project Proponent submitted the revised Wildlife conservation plan approved by Chief Wildlife Warden, Gandhinagar, Gujarat vide Lr no.: WLP/32/C/417-420/2022-23 dated 11.07.2022 with a budget of Rs 35.0 Lakhs.

ix. Greenbelt/plantation details:

Proposed area for green belt/plantation	4.04 Ha
Budget for green plant& plantation till the end of life of mine.	Rs. 4.5 Lakh per annum
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	1.3 (till June 2022)

x. Baseline Details:

The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Season i.e., December, 2018 to February, 2019. The Monitoring results of ambient air, surface water, soil, ambient noise and ground water have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.

Period	December, 2018 to February, 2019				
AAQ parameters at 7 locations	Pollutant	Min, $\mu\text{g}/\text{m}^3$	Max, $\mu\text{g}/\text{m}^3$	98 %ile, $\mu\text{g}/\text{m}^3$	Standard, $\mu\text{g}/\text{m}^3$
	PM10	68.8	81.4	77.3	100
	PM2.5	30.1	33.9	33.9	60
	SO2	9.5	11.9	11.9	80
	NOx	12.8	17.5	17.3	80
AAQ modeling	Pollutant	Baseline Concentration, $\mu\text{g}/\text{m}^3$	Incremental Concentration, $\mu\text{g}/\text{m}^3$	Total GLC, $\mu\text{g}/\text{m}^3$	Standard
	PM10	78.1	0.8	78.9	100
	PM2.5	37.6	0.5	38.1	60
	SO2	12.4	0.08	12.48	80
	NOx	16.8	0.2	17.0	80
Noise level at 9 locations	Day Time: 37.3 to 58.9 Leq dB (A) Night Time: 26.7 to 46.5 Leq dB (A)				
Ground water quality at 3 locations	PP reported that the pH value of ground water samples was found in the range from 7.2 to 7.6. Total Dissolved Solids (TDS) ranged between 259 to 296 mg/l, Total Hardness (TH) ranged between 156 to 197 mg/l, Chloride content of ground water samples was found in				



	the range from 46 to 51 mg/l. The results of ground water were compared to Indian Standard Specification of Drinking water IS: 10500:2012 and found fit for drinking purpose.
Surface water quality at 2 locations	PP reported that the pH value of the surface water ranged from 7.72-7.4, Electrical Conductivity (EC) ranged from 446-487µS/cm, Total alkalinity 142 - 179 mg/l, Total Hardness 136-191 mg/l, Total Dissolved Solids 141-176 mg/l and Dissolved Oxygen 6.6-6.9 mg/l.
Soil quality at 5 locations	PP reported that the pH of the soil found to be slightly basic (7.1 to 7.6). Electrical conductivity (EC) ranged from 567-598 µmhos/cm. Bulk density of soil sample samples ranged from 1.38-1.42 gm/cc, Moisture Content was found between 12.1-15.8% and Organic matter was present in the range of 0.51-0.86 %.
Traffic Survey	PP reported that the traffic study was conducted for SH-27 and nearby intersection passes through the project site. After the proposed activity at LI-Near village intersection the PCU/day is 383 and V/C ratio is 0.06, the LOS is 'A' and at L2-- At SH-27, the PCU/day is 4280 and V/C ratio is 0.28, LOS is 'B'. The V/C ratio will change to 0.06 and 0.28 with LOS being "A" which is "Excellent" near village intersection and "B" which is "Very good" at State highway as per classification. So the additional load on the carrying capacity of the concerned roads is not likely getting affected.

xi. Public Hearing (PH) Details:

Advertisement for PH with date	Public hearing advertisement in English was published in "Times of India" dated 24/02/2021 and in Gujarati was published in "Divya Bhaskar" dated 24/02/2021.
Date of PH	26 <sup>th</sup> March, 2021 at 12:00 hrs
Venue	M/s Aniali Rana Bordi Limestone mine, (M/s Tata Chemicals Limited), Crusher Area, Opp. Office of Tata Chemicals, Survey No. 207/P, Village: Aniali, Tehsil: Ranavav, Dist: Porbandar, Gujarat.
Chaired by	Shri D.N Modi, IAS, District Collector & District Magistrate, Porbandar
Main issues raised during PH	Employment opportunities for locals, Medical assistance to locals, Social infrastructure (village road construction)
Budget proposed for addressing issues raised during PH	Rs 5.4 Lakhs (Capital) and Rs 3.45 Lakhs (Recurring) and for addressing the public concerns/issues as raised during PH.

xii. Previous EC compliance, Past production, CTE/CTO details:

Particulars	Letter no. and date
Certified EC compliance report	The Project Proponent submitted the compliance

	report certified by the Integrated Regional Office (IRO), Gandhinagar vide letter dated 14.03.2022. Site visit was conducted by IRO on 29.12.2021.																																																																																																				
Certified past production	<p>Project Proponent submitted the past production details certified by the District geologist, Porbandar from the year 1985-86 to 2017-18. PP submitted that this is an existing mine, where EC was obtained in year 2015 for the annual production of 14,000 Tons of limestone. PP had not started the mining operation till 2016-17. Mining Operation has started only after the declaration of Barda WLS ESZ and its subsequent notification dated 28.04.2017. After obtaining the EC, mine become operational in year 2017-2018. About 12.150 thousand Tonnes of mineral has been mined out in the year 2017-2018.</p> <table border="1" data-bbox="743 741 1360 1877"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>Total Production (in 000 Tonnes)</th> <th>EC capacity (million TPA)</th> </tr> </thead> <tbody> <tr><td>1</td><td>1985-86</td><td>-</td><td>-</td></tr> <tr><td>2</td><td>1986-87</td><td>23.025</td><td>-</td></tr> <tr><td>3</td><td>1987-88</td><td>29.404</td><td>-</td></tr> <tr><td>4</td><td>1988-89</td><td>18.232</td><td>-</td></tr> <tr><td>5</td><td>1989-90</td><td>-</td><td>-</td></tr> <tr><td>6</td><td>1990-91</td><td>-</td><td>-</td></tr> <tr><td>7</td><td>1991-92</td><td>-</td><td>-</td></tr> <tr><td>8</td><td>1992-93</td><td>-</td><td>-</td></tr> <tr><td>9</td><td>1993-94</td><td>-</td><td>-</td></tr> <tr><td>10</td><td>1994-95</td><td>-</td><td>-</td></tr> <tr><td>11</td><td>1995-96</td><td>-</td><td>-</td></tr> <tr><td>12</td><td>1996-97</td><td>-</td><td>-</td></tr> <tr><td>13</td><td>1997-98</td><td>-</td><td>-</td></tr> <tr><td>14</td><td>1998-99</td><td>-</td><td>-</td></tr> <tr><td>15</td><td>1999-2000</td><td>-</td><td>-</td></tr> <tr><td>16</td><td>2000-01</td><td>-</td><td>-</td></tr> <tr><td>17</td><td>2001-02</td><td>-</td><td>-</td></tr> <tr><td>18</td><td>2002-03</td><td>-</td><td>-</td></tr> <tr><td>19</td><td>2003-04</td><td>-</td><td>-</td></tr> <tr><td>20</td><td>2004-05</td><td>-</td><td>-</td></tr> <tr><td>21</td><td>2005-06</td><td>-</td><td>-</td></tr> <tr><td>22</td><td>2006-07</td><td>-</td><td>-</td></tr> <tr><td>23</td><td>2007-08</td><td>-</td><td>-</td></tr> <tr><td>24</td><td>2008-09</td><td>-</td><td>-</td></tr> </tbody> </table>	S. No	Year	Total Production (in 000 Tonnes)	EC capacity (million TPA)	1	1985-86	-	-	2	1986-87	23.025	-	3	1987-88	29.404	-	4	1988-89	18.232	-	5	1989-90	-	-	6	1990-91	-	-	7	1991-92	-	-	8	1992-93	-	-	9	1993-94	-	-	10	1994-95	-	-	11	1995-96	-	-	12	1996-97	-	-	13	1997-98	-	-	14	1998-99	-	-	15	1999-2000	-	-	16	2000-01	-	-	17	2001-02	-	-	18	2002-03	-	-	19	2003-04	-	-	20	2004-05	-	-	21	2005-06	-	-	22	2006-07	-	-	23	2007-08	-	-	24	2008-09	-	-
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	26	2010-11	-	-	
	27	2011-12	-	-	
	28	2012-13	-	-	
	29	2013-14	-	-	
	30	2014-15	-	-	
	31	2015-16	-	0.014	
	32	2016-17	-	0.014	
	33	2017-18	12.150	0.014	
Consent to Operate	Project Proponent submitted the Consent to Operate issued by the Gujarat Pollution Control Board vide Consent Order No: AW-83086 dated 17.12.2016 for production of Limestone 14,000 MT/year and the consent was valid upto 30.10.2021. Thereafter, PP obtained the CTO vide No. GPCB/CCA/PBR-168/ID 48801/600475 dated 15.09.2021.				

xiii. Rehabilitation & Resettlement:

R & R details	Project Proponent submitted that there are no project affected persons due to this project. Hence R&R plan is not applicable to this project.
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xiv. Court case details:

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

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent submitted an Affidavit in a non-judicial stamp paper of Rs 100 bearing no BT 681367 dated 16.01.2022 stating that the company will comply with all the statutory requirements & judgment of Hon'ble Supreme Court dated 2 <sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
Project Proponent submitted an undertaking	Project Proponent submitted an undertaking mentioning that this EIA/EMP Report was prepared for obtaining Environment Clearance (EC) of Expansion of Aniali Rana Bordi Limestone Mining Project near village-Aniali, Tehsil- Ranavav, District Porbandar, Gujarat with a mine lease area of 12.27 Ha for mining of Limestone mineral and has been

	prepared as per the conditions laid down in Terms of Reference (ToR) prescribed by Ministry of Environment, Forest and Climate Change, with vide letter no- J-11015/100/2018-IA.II (M) dated 09.10.2018. The authorised signatory for M/s TATA Chemicals Limited, affirm that all the data submitted and the information presented in this report are factually correct to the best of my knowledge.
Consultant submitted an undertaking	The Consultant submitted a declaration stating the consultant organization shall be fully accountable for any misleading information. It is certified that no unethical practices, plagiarism involved in carrying out the work and external data / text has not been used without proper acknowledgement while preparing this EIA report.

xvi. Details of the EMP

Activities	Capital cost (Lakhs/Annum)	Recurring cost (Lakhs/annum)
Air quality monitoring	-	0.5
Water quality control	-	0.5
Noise abatement	-	0.3
Green belt development	1.5	3.0
Mining activities including transportation (Covering of mineral in trucks, Wheel washing). Regular Dust Suppression on haul road.	7.0	3.30

xvii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	0.085+0.054 = Rs 0.139 Cr
Recurring Cost for EMP	Rs 0.055 Cr
Project Cost	Rs 0.75 Cr
Employment	46 persons

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

The EAC on viewing the KML file noted that the Forest and Barda Wildlife sanctuary is located in the vicinity of the mine lease area. The Project Proponent informed the EAC that the Naliyadhar Reserve Forest is located at a distance of ~0.010 km, S and Barda Wildlife sanctuary is located at a distance of 4.02km, NW from the mine lease area and 112.21 meters from ESZ. The Project Proponent informed that the

no forest land is involved in the mine lease area. The Project Proponent also informed the EAC that the final ESZ Notification of Barda Wildlife Sanctuary was issued vide S.O. 1365(E) dated 28.04.2017 and mining operation was started after the ESZ was declared as the mine lease area falls outside the ESZ area and in support of this certified map from the State Forest Department that the mine lease area falls outside the ESZ of Barda Wildlife Sanctuary was also submitted and hence NBWL clearance is not applicable to this project. Further, the Project Proponent informed the EAC that there are two other mines located adjacent to this mine lease area. Thereafter, the EAC deliberated on the additional details sought submitted by the Project Proponent.

The EAC noted the Project Proponent has not submitted the certified production details from the year 2017-18 to 2021-22. The Project Proponent informed the EAC that the copy is available and will submit. The EAC also noted that the Project Proponent has not submitted the Wildlife Conservation Plan in PARIVESH and submitted only the approval letter of Wildlife Conservation Plan. The EAC observed that in Form 2 under S.No: 28, the Project Proponent has submitted that there is no presence of Schedule-I Species and in EIA report (Pg. No: 130), Project Proponent submitted that Pangolin is the Schedule-I Species found in the study area and in the brief submitted by the Project Proponent it was mentioned that the Indian Peafowl and Leopard are the Schedule-I Species found in the study area and during the EAC meeting, the Project Proponent informed that the Indian Peafowl is the only Schedule-I species found in the study area. The EAC also observed that the Project Proponent has not submitted the authenticated list of flora and fauna in the study area. The EAC was of the view that there is a discrepancy in the information submitted by the Project Proponent. The EAC warned the Consultant for the incompetence to bring out the actual information without any supporting document even after the additional details sought several times.

The EAC noted that the Project Proponent has mentioned that the mining plan was approved on 18.02.2021 but in PARVIESH the Project Proponent has submitted the mining plan which was approved on 14.09.2016. The EAC also noted that the Project Proponent has submitted the details of total excavation in tonnes to be handled annually. The EAC observed that the Integrated Regional Office (IRO), Gandhinagar vide letter dated 14.03.2022 mentioned that the *“out of total 50 conditions, it may be seen that 35 are complied, 4 are partly complied, 8 are agreed to comply and 3 are not applicable to the project proponent. These have been explained in the foregoing compliance report against each of the conditions, and the PP needs to take necessary and time bound action for early compliance in respect of relevant conditions. A time targeted action taken report shall be furnished to MoEF&CC, IRO, Gandhinagar in this regard within 30 days of receipt of the said letter”*. The information is still awaited from the Project Proponent. The EAC opined that the reply of the Project Proponent w.r.t compliance of observations of the EAC is not satisfactory.

The EAC noted that the validity of the NABET Accredited EIA Consultant, M/s In Situ Enviro Care has already expired on 08.08.2022. The EAC also noted that the Project Proponent has not uploaded the extension letter in PARIVESH portal. Further, the EAC noted that as per the information available in the NABET website ([http://eia.nabet.qci.org.in/Accredited EIA Consultant.aspx](http://eia.nabet.qci.org.in/Accredited_EIA_Consultant.aspx)) it was mentioned that the *“Though the EIA Coordinator for this sector was found suitable for Category A. However, the organization as a whole was accredited for Category B, in view of scoring less than overall 60% marks in their Office Assessment. Thus, the ACO cannot take up Category A project in this sector. Conditions apply”*. During the meeting, the Consultant accepted that accreditation is for only Category B as on date. The EAC was of the view that neither the Project Proponent nor the Consultant revealed the information until the EAC took clarification. The EAC took a stringent view and ask the Ministry to take action against the Consultant for misleading the EAC and also for hiding the information. Therefore, the EAC **deferred** the proposal.

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

The instant proposal is for mining of Iron Ore in Bagiaburu Iron Ore mine of M/s The Orissa Minerals Development Company Limited for increase in Iron Ore production upto 0.36 MTPA in the mine lease area of 21.52 ha, located at Village Uliburu, Tehsil Barbil, District Keonjhar, Odisha.

2. Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

- i. The mine lease area is located between Latitude 22°07'52.417"N to 22°08'20.973"N and Longitude: 85°23'02.099"E to 85°23'26.266" E. The mine lease area falls under the Survey of India Toposheet No: 73F/8 and falls in Seismic Zone-II.
- ii. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals and attracts the general conditions as the interstate boundary of Jharkhand-Odisha located at a distance of 1.70 km, N from the mine lease area and falls under Category "A" and appraised at the Central level.
- iii. As decided by the Competent Authority, considering tenure of EAC (Violation) till June 2021, it has been decided that, henceforth all the EC applications for which ToR was recommended by the EAC (Violation) shall be appraised by the sectoral

EACs. The respective sectors may consider co-opting two-three members from EAC (Violation) to facilitate appraisal of proposals related to violations.

- iv. The project was granted Terms of Reference (ToR) by the Ministry vide its Lr No. F. No. 23- 205/2018-IA.III (V) dated 09.03.2020 based on recommendation of EAC(V) in its meeting held during 25-26, June 2019.
- v. Details of Mine lease:
  - a. The Project Proponent submitted that the initially Bagiaburu mine lease was executed in favour of M/s. OMDC Ltd on 11.10.1971 for a period of 9 years with effect from 11.10.1971 to 30.09.1980.
  - b. Then, 1<sup>st</sup> renewal of mining lease was made on 01.10.1980 with effect from 01.10.1980 to 30.09.1990 which is a deemed renewal.
  - c. 2<sup>nd</sup> renewal of mining lease (RML) was executed on 29.04.2000 for a period of 20 years with effect from 01.10.1990 to 30.09.2010.
  - d. 3<sup>rd</sup> renewal of mining lease was applied on 10.08.2009 for a period of 20 years w.e.f 01.10.2010 to 30.09.2030 as per rule 3 92) of Mining Rules 2015.
  - e. Project Proponent submitted that Steel & Mines Department, Govt. of Odisha vide Lr No.III(A)SM-07/20131266/SM, Bhubaneswar, dated 06.02.2020 *inter-alia* mentioned that "the above lease is deemed to be granted for a period of 50 years from 11.10.1971 to 20.10.2021 subject to execution of supplementary lease deed for the balance period within a period of three months from the date of ISSUC of this order subject to availability of the requisite forest clearance. Supplementary lease deed was executed on 07.10.2021 for the period 11.10.1971 to 10.10.2021.
  - f. Further, Project Proponent submitted that the Govt., Odisha vide order no. III(A)SM07/20139(pt)/10423/SM, Bhubaneswar dated 07.12.2021 have extended the validity of mining lease for another period of 20 years from 11.10.2021 to 10.10.2041 and Supplementary Lease Deed was executed on 06.07.2022 for the period from 11.10.2021 to 10.10.2041.

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

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

vii. Details of Mining Plan:

Modification of Mining Plan including Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	RMP/A/06/ORI/BHU/2021-22
	Date	22.07.2021
	Mineral	Iron Ore
	Mine lease area	21.52 ha
	Validity	Validity of this document shall expire on 10.10.2021 and further validity of this document is subject to the decision of the State Government on extension of mining

		lease as communicated vide Director of Mines letter No. MXIII(d)01/2019/5292/DM dated 15.07.2021.
Mining Parameters	Quantitative Description	
Method of Mining	Opencast mechanized mining	
Total Geological Reserves	49,41,794 MT	
Mineable Reserves	37,92,932 MT	
Life of mine	11 years (May exceed on further exploration)	
Bench Height	6 m	
Bench Width	9m or more than the height of the bench	
Individual bench slope	75° - 85°	
Overall pit slope	45°	
Drilling/Blasting	The benches having 6 m height will be drilled for blast holes by 115mm dia DTH drills fed by compressed air at 12.5 cum/min at 14.5 kgf/sq.cm pressure. Explosive will be used of Class II booster and Column charge with accessories like OD, ED/ Nonel, Excel, Safety Fuse and Detonating cord. Storage of explosive will be at magazine having license no. E/EC/OR/22/26/E/12708 with in Thakurani lease of M/s OMDC Ltd.	
Crushing/Screening	Project Proponent submitted that during the plan period, dry crushing & screening process will be adopted in the mine lease area for production of sized ore. PP proposes to install 270 TPH crushing and screening unit for processing of ROM.Lumps and fines will be dispatched through trucks after weighing as per the demand of the consuming industries. Due to dry processing there will be no generation of tailings.	
RoM output size	Project Proponent reported that the various finished products of the screening and crushing units are 0-10mm, 10-40mm, + 5-18mm and 0-5mm.	
Transportation details	Project Proponent submitted that the Ore will be transported from quarry site to screen and crushing site for processing by 20 Tonne dumpers and waste materials will be dispatched from quarry to dumping site by using same capacity dumpers. The sized materials was loaded mechanically and transported further by the trucks to the steel and sponge iron plants mostly located in the State.	
Waste	<p>Project Proponent reported that due to earlier mining operation three waste dump has been created covering an area of 1.407Ha.</p> <p>During this plan period, a total of 1,35,865 cu.m of waste will be generated. Out of this, 10% i.e. 13,586.50cu.m will be utilized for road maintenance and balance 1,22,278.50cu.m will be</p>	



	<p>disposed over the existing dump in two terraces with an average height of 10m for each terrace. An additional area of 1.00 Ha. will be required for disposal of waste during the plan period.</p> <p>During conceptual period, 1,40,240 cu.m wastes will be generated. Out of which about 10% i.e. 14,024 cum will be utilized for road maintenance. Balance 1,26,216 cum will be utilized for back filling of mined out land. During conceptual period, back-filling will be done at southern part of the lease.</p>
Mineral Rejects	<p>Project Proponent reported that during ensuing plan period, a total of 5,72,725MT of Mineral reject will be generated. The generated Mineral reject during the Plan period will be temporarily stacked at earmarked site and blended with high grade iron ore and sold to the consumers as per requirement.</p> <p>Beyond plan period mineral reject i.e. 45-58% Fe will be generated. These mineral reject will be sold to the market by blending with high grade iron ore. The mineral reject generated will be stored for a short period as per requirement. However, temporary mineral reject stack yard has been proposed during planned as well as beyond planned period.</p>
Intersection of Groundwater table	<p>Project Proponent reported that the water table exists at a depth of 10m (455 MSL) in rainy season &amp; at 15m (450 MSL) MSL in dry season from general surface level (465 MSL). There is no possibility of interception of groundwater table in present plan period.</p>

viii. Water requirement:

Total water requirement	50.0 KLD	Particulars	Requirement	Source
		Mining operations including dust suppression and plantation	40.0 KLD	Nalada pond of M/s OMDC
		Domestic Use	10.0 KLD	Bore well
Permission	<p>Project Proponent submitted the No Objection Certificate (NOC) obtained from Central Ground Water Authority (CGWA) vide CGWA/NOC/MIN/ORIG/2020/8658 dated 21.09.2020 for Groundwater Abstraction of 10.0 m<sup>3</sup>/day for the period upto 20.09.2022.</p>			

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

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

x. Presence of Environmentally Sensitive areas in the study area

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

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

xii. Baseline Details:

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

Period	October to December, 2019				
AAQ parameters at 7 locations	Pollutant	Min, $\mu\text{g}/\text{m}^3$	Max, $\mu\text{g}/\text{m}^3$	98 %ile, $\mu\text{g}/\text{m}^3$	Standard, $\mu\text{g}/\text{m}^3$
	PM10	48.99	77.00	75.71	100
	PM2.5	27.13	53.23	52.32	60
	SO2	6.02	10.58	10.36	80
	NOx	11.80	22.89	22.03	80
AAQ modeling	Pollutant	Baseline Concentration, $\mu\text{g}/\text{m}^3$	Incremental Concentration, $\mu\text{g}/\text{m}^3$	Total GLC, $\mu\text{g}/\text{m}^3$	Standard
	PM10	68.26	4.52	72.78	100
	PM2.5	42.71	3.3	46.01	60
	SO2	9.82	2.77	12.59	80
	NOx	17.70	5.03	22.73	80
Noise level at 7 locations	Day Time: 47.7 to 54.5 Leq dB (A) Night Time: 39.0 to 53.4 Leq dB (A)				
Ground water quality at 5 locations	Project Proponent reported that the pH of the ground water samples ranged from 5.52 to 6.53, which is between the acceptable pH limit for drinking water. Fluoride Concentration is in range of 0.3 to 0.5 mg/l. which is under permissible limit. The concentration of Total Dissolved Solids (TDS) & Total hardness observed in different ground water samples are in range of permissible category stipulated by Bureau of Indian standards. From the above data it is				

Minutes of 3<sup>rd</sup> EAC (Non-Coal Mining) meeting held on 5<sup>th</sup> September, 2022

	observed that all parameters are within permissible limit of drinking water standard.
Surface water quality at 2 locations	PP reported that the BOD value ranged from 1.3 to 1.5 which indicate very low organic pollution load. All samples have BOD values are within prescribed limit (<30.0 mg/l as in IS 10500:2012). Chemical Oxygen Demand (COD) observed <5 which indicates low level of organic pollution load in term of COD.
Soil quality at 7 locations	PP reported that the pH values of the collected samples were in the range of 6.62 to 7.86, organic matter in the range of 0.56 (%) to 0.87(%), water holding capacity in the range of 18.1 to 30.4 %, potassium in the range of 0.003% to 0.007%, total nitrogen in the range of 0.002 to 0.005%, bulk density in the range of 1.08 to 1.14 gm/cc. These all parameter indicates that the soil is not so fertile in this area.
Traffic Survey	PP reported that the total Iron ore handling in the mine will be max. 3,60,000 TPA based on 300 working days per annum. Only 10 trips hourly vehicle traffic will be increased due to expansion with tipper capacity@10t or 6-7 trips @ 18t capacity.

xiii. Public Hearing (PH) Details:

Advertisement for PH with date	The New Sunday Express and The Dharitri on 27.03.2021  The New Sunday Express and The Dharitri on 19.06.2022
Date of PH	04.05.2021 (Postponed) 21.07.2022 (Reschedule of Public hearing)
Venue	11.00 AM in Barbil Village (U.No. 7, Khata No.483, Plot No. 1343/1772, Kissam-Gharabari-II, Area-Ac.440) of Keonjhar District
Chaired by	Sri Jadumani Mahala, IAS (SAG), Additional District Magistrate (Revenue), Keonjhar
Main issues raised during PH	Education, Employment, Compensatory afforestation, protection of waterbodies such as river & nallahs, control of pollution, water sprinkling for dust suppression, monitoring the condition of road, Generation of Dust during drilling, blasting and transportation, better facilities for OMDC hospital, supply of clean drinking water, ambulance facility
Budget proposed for addressing issues raised during PH	Capital Cost: Rs.15.0 Lakhs Recurring Cost: Rs 5.0 Lakhs

xiv. Details of Past production:

Particulars	Letter no. and date
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Certified past production	<p>The Project Proponent submitted the past production details certified by Deputy Director of Mines, Joda Circle vide Memo no. 496/Mines dated 22.02.2019 for the period 1992 to 2017-18. As per the past production details submitted by the PP, it was observed that the PP started the mining operation from 1992-93 onwards and carried out till 2010-11 and increased the production beyond the base year 1992-93 without obtaining prior environmental clearance and the mine is closed since 2010-11.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>Production (MT)</th> <th>EC capacity (MTPA)</th> </tr> </thead> <tbody> <tr><td>1</td><td>1992</td><td>547.000</td><td>-</td></tr> <tr><td>2</td><td>1993</td><td>Not readily found available</td><td>-</td></tr> <tr><td>3</td><td>1994</td><td>30.000</td><td>-</td></tr> <tr><td>4</td><td>1995 to 2000</td><td>No production</td><td>-</td></tr> <tr><td>5</td><td>2000-01</td><td>2000.000</td><td>-</td></tr> <tr><td>6</td><td>2001-02</td><td>4395.000</td><td>-</td></tr> <tr><td>7</td><td>2002-03</td><td>45571.000</td><td>-</td></tr> <tr><td>8</td><td>2003-04</td><td>5500.000</td><td>-</td></tr> <tr><td>9</td><td>2004-05</td><td>65500.000</td><td>-</td></tr> <tr><td>10</td><td>2005-06</td><td>5000.000</td><td>-</td></tr> <tr><td>11</td><td>2006-07</td><td>17835.000</td><td>-</td></tr> <tr><td>12</td><td>2007-08</td><td>28450.000</td><td>-</td></tr> <tr><td>13</td><td>2008-09</td><td>5000.000</td><td>-</td></tr> <tr><td>14</td><td>2009-10</td><td>67100.000</td><td>-</td></tr> <tr><td>15</td><td>2010-11</td><td>6350.000</td><td>-</td></tr> <tr><td>16</td><td>2011-12</td><td>-</td><td>-</td></tr> <tr><td>17</td><td>2012-13</td><td>-</td><td>-</td></tr> <tr><td>18</td><td>2013-14</td><td>-</td><td>-</td></tr> <tr><td>19</td><td>2014-15</td><td>-</td><td>-</td></tr> <tr><td>20</td><td>2015-16</td><td>-</td><td>-</td></tr> <tr><td>21</td><td>2016-17</td><td>-</td><td>-</td></tr> <tr><td>22</td><td>2017-18</td><td>-</td><td>-</td></tr> </tbody> </table> <p>PP reported that the DDM, Joda has raised the demand notice vide no. 4088/Mines dated 02.09.2017 for an amount of Rs. 19,68,86,066/- (Rupees Nineteen Crore Sixty Eight Lakhs Thousand Sixty Seven Only) towards compensation under Section 2 MMDR Act, 1957</p>	S. No	Year	Production (MT)	EC capacity (MTPA)	1	1992	547.000	-	2	1993	Not readily found available	-	3	1994	30.000	-	4	1995 to 2000	No production	-	5	2000-01	2000.000	-	6	2001-02	4395.000	-	7	2002-03	45571.000	-	8	2003-04	5500.000	-	9	2004-05	65500.000	-	10	2005-06	5000.000	-	11	2006-07	17835.000	-	12	2007-08	28450.000	-	13	2008-09	5000.000	-	14	2009-10	67100.000	-	15	2010-11	6350.000	-	16	2011-12	-	-	17	2012-13	-	-	18	2013-14	-	-	19	2014-15	-	-	20	2015-16	-	-	21	2016-17	-	-	22	2017-18	-	-
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	<p>for production without/in excess of the EC as rationalize the CEC, in pursuance to the judgment dated 02.08.2017 o Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause Vs UOI and others. PP submitted that the demand has been revised to Rs. 10,20,23,549 (Rupees Ten Crore Twenty Lakh Twenty Three Thousand Five Hundred Forty Nine only) by the Office of the Deputy Director of Miner, Joda Circle vide letter no.6098 dated13.12.2017. PP submitted that the Payment of Rs.35,95,337 (Rupees Thirty Five lakhs Ninty Five ThousandThree Hundred Thirty Seven) made vide e-challan reference Id: 27DE0E010C and no.8443/237-30/12/2017.</p> <p>PP submitted that the Steel and Mines Department, Government of Odisha vide letter no. 2614/SM dated 05.04.2018 issued a notice to pay the remaining amount along with the interest.Payment of Rs. 23,07,83,836/- made towards production withoutin excess of the EC. Accordingly, PP made a payment of Rs. 5,85,63,282/- (e-challan reference Id: 2A2B640CDA and no.8443/984. 17/11/2018), Rs. 9,00,00,000/- (e-challan reference Id: 2A2B640D0B and no.8443/986-17/11/2018), Rs. 8,22,20,554/- (echallan reference Id: 2A2B640142 and no. 8443/987-17/11/2018)(Total Rs.: 5,85,63,232 +9,00,00,000 + 8,22,20,554 = 23, 07,83,836/-).</p> <p>PP further submitted that the Office of the Deputy Director of Mines, Joda Circle vide letter no.5252 dated 23.10.2017 demanded to pay sum of Rs. 7,22,791/- (Rupee's Seven Lakhs Twenty Two Thousand Seven Hundred Ninety One Only) towards compensation under Section 21(5) of MMDR Act, 1957 for production without/in excess of the mining plan &amp; CTO as rationalized by the CEC, in pursuance to the judgment dated 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause vs. UOI and others. PP submitted that Payment of Rs 7,22,791/- made vide e-challan reference Id: 2C44A2F4E5 and no.8443/1228-31/01/2019 and Payment of Rs 1,73,707.00 towards interest payment vide e-challan reference Id: 2C4ED6C43E and no.8443/30-05/03/2019.</p>
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xv. Ecological Damage Assessment, Natural Resource Augmentation Plan and Community Resource Augmentation Plan:

The Project Proponent submitted that the damage to environment resulted due to mining activities carried out in absence of valid statutory permissions like Forest Clearance and Environmental Clearance has been assessed by ascertaining weightage matrix index method. Four scale of matrix has been fixed ranging major negative (-3) to none (0). Mining operations carried out at lease were restricted to ML area only within an area of 2.787 ha. Excavation at mine lease has not lead to a change in the overall contour, however temporary impact which is likely to have a remediation at a later stage during reclamation and backfilling. Surrounding air quality might have been impacted due to dust emissions and vehicle/machinery emissions. No groundwater intersection has been done and no any surface water contamination done due to mining activities. Thus, there was no impact on water environment. Mining activities like drilling and blasting and movement of JCB, Trucks contributed to noise. The impact is temporary and short term. Few trees were cut due to activity of mining at ML site. PP reported that the extent of damage was low to moderate. PP submitted that the Bank guarantee against the remediation will be submitted after finalization of the cost for proposed measures and recommendation of the Hon'ble EAC committee of MoEF&CC, New Delhi. PP also submitted the compensatory budget for remedial measures as given under

A. Remediation Plan & Budgetary Provisions:

S. No	Particulars	Activity	Remediation budget
1	Land Environment	Water sprinkling	Rs 1,50,000
2	Air Environment	Air Monitoring Plantation	Rs 1,00,000 Rs 4,50,000
3	Water Environment	Rainwater Harvesting (2) at site Construction of septic tank & soak pit	Rs 6,00,000  Rs 1,00,000
4	Noise Environment	Earplugs for labour	Rs 1,50,000
5	Biological Environment	Plantation and green belt development in inside premises (Rs. 1,00,000/- already incurred + Rs. 7,50,000 is proposed for 1 <sup>st</sup> , 2 <sup>nd</sup> , & 3 <sup>rd</sup> years)	Rs 8,50,000

6	Socio-economic Environment	Solar Light	Rs 6,00,000
Total			Rs 30,00,000

**B. Natural Resource Augmentation Plan:**

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	
1	Avenue Plantation (200 m) - 30 plants on each side of the road	1,00,000	1,00,000	1,00,000	3,00,000
2	Maintenance of Avenue Plantation	50,000	50,000	50,000	1,50,000
3	Installation of Rainwater harvesting at 3 nearby Govt. Schools of Keonjhar District	1,00,000	1,00,000	1,00,000	3,00,000
Total					Rs 7,50,000

**C. Community Resource Augmentation Plan:**

S. No	Activity	Year-wise budget (INR)			Total Budget (INR)
		1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	
1	RO with water cooler at 5 Govt. Schools	50,000	50,000	50,000	1,50,000
2	6 Computer in Govt. School	1,00,000	1,00,000	1,00,000	3,00,000
3	Plantation at public parks in nearby areas	50,000	50,000	50,000	1,50,000
Total					Rs 6,00,000

**D. Economic Benefit derived due to violation:**

The Project Proponent submitted that the saving of interest on the cost of environment protection measures and other activities is approximately Rs. 1,00,000 to be spent for drinking water activity i.e. providing water cooler along with RO in nearby Govt. hospital at Keonjhar. However, in reality no benefit has been obtained due to violation.

**E. Total budget for Remediation, Natural & Community Resource Augmentation Plan and Economic Benefit**

S. No	Particulars	Proposed Budget (INR)
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Minutes of 3<sup>rd</sup> EAC (Non-Coal Mining) meeting held on 5<sup>th</sup> September, 2022

1	Remediation Plan	Rs 30,00,000
2	Natural Resource Augmentation Plan	Rs 7,50,000
3	Community Resource Augmentation Plan	Rs 6,00,000
4	Economic Benefit Derived due to violation	Rs 1,00,000
	Total	Rs 44,50,000

xvi. Rehabilitation & Resettlement:

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

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

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

xix. Details of the EMP:

S. No	Particulars	Capital Cost (Proposed in Rs Lakhs)	Recurring Cost (Proposed in Rs Lakhs)
1	Pollution Control & Conservation of	12.5	2.0

	Natural Resources (Garland Drain, Water sprinkler, Septic tank, Rainwater Harvesting Structure)		
2	Pollution Monitoring (Air, soil, Water, Noise)	7.0	1.5
3	Occupational Health & Safety	3.0	1.5
4	Greenbelt development	7.5	3.5
5	Miscellaneous (Fencing, protection, regeneration and maintenance of safety zone)	6.0	1.5
		35.0	10.0

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP + capital cost of Public hearing)	0.35 + 0.15
Project Cost	Rs 11.0
Employment	142 persons

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

The EAC noted that the instant proposal is for grant of environmental clearance under Ministry's Notification S.O 804 (E) dated 14.03.2017. The EAC observed that in Form-2, the Project Proponent submitted that it is not a violation case and application is not being submitted under Notification No. S.O.804(E) dated 14.03.2017. The EAC warned the Consultant for submitting inappropriate information and the EAC asked to revise the Form 2 accordingly.

The EAC on viewing the KML noted that the nallah and a road is passing through the mine lease area. The Project Proponent informed the EAC that there is only one seasonal nallah flowing within the mine lease area and will not be disturbed/diverted at any stage of mining operation and a safety zone of 50 m will be maintained and a forest road is passing through the mine lease area on the southern direction. The EAC asked the Project Proponent to submit the protection plan of seasonal nallah. The EAC also asked the Project Proponent to submit the letter from the Principal Chief Conservator of Forest (PCCF) to confirm whether there is any presence of Elephant corridor in the study area or not?

The Project Proponent also informed the EAC that the entire mine lease area of 21.52 ha is a forest land and Stage-II Forest clearance has been obtained for the entire forest land. The EAC asked the Project Proponent about the direction of the commencement of the mining operation. The Project Proponent informed the EAC that

the mining will commence from the exposed surface in the northern direction to the southern direction. The EAC also noted that Shri Jagannath Steel & Power Ltd is located adjacent to the mine lease area on the western side. The EAC asked the Project Proponent whether the impact of Shri Jagannath Steel & Power Ltd was also considered for prediction of air quality modeling or not? The Project Proponent informed that it has been considered for prediction of air quality modelling. The EAC was of the view that the Project Proponent has not submitted the capacity considered and the input parameters used for the prediction of air quality modelling and also not indicated about the normative and peak production capacity and asked the Project Proponent to revise the air quality modeling.

The EAC noted that State Govt. filed a case in the JMFC Court, Barbil, Odisha vide case no. 115/2013 dated 30/07/2013 U/s 15 of the Environment (Protection) Act, 1986 and the EAC observed that there is no information after the year 2013. The Project Proponent informed the EAC that after the year 2013 there is no hearing till date. The Ministry has examined the documents submitted by the Project Proponent earlier and it was found that the Project Proponent submitted that the last date of hearing was on 20.06.2019. The EAC noted that the Project Proponent and the Consultant provided the contradictory information and the EAC asked to provide the current status. The EAC opined that the Wildlife Conservation Plan needs to be revisited since it was approved on 05.02.2011 and the EAC asked the Project Proponent to submit the compliance of Wildlife Conservation Plan from the Forest Department. The EAC also noted that the Project Proponent has not submitted the total excavation to be handled annually.

The EAC noted that the Project Proponent has allocated the budget under Corporate Environmental Responsibility which is not acceptable as on dated and the EAC advised the Project Proponent to revise the budget as per Ministry's OM dated 30.09.2020. The EAC asked the Consultant to be updated with the provisions of EIA Notification, 2006 and its subsequent amendments. The EAC asked the Project Proponent to revise the specific diesel consumption of 785 liters/day to liters/tonnes. The EAC also asked the Proponent to submit the action plan for promotion of Solar Energy. The EAC was of the view that the Project Proponent needs to revise the compliance of the NEERI conditions with time bound action plan. The EAC also noted that the Consultant has mentioned the another project name "Kheratarla Wollastonite Calcite Mine" in the EIA report (Pg. No 108-114). The EAC warned the Consultant for doing such mistakes. The EAC observed that the baseline data was carried out during October to December, 2019 and is almost 3 years old and hence the EAC asked the Project Proponent to revalidate with one-month baseline data.

The EAC deliberated on the ecological damage assessment and noted that the Project Proponent used Matrix index method to assess the probable damage is not acceptable. The EAC noted that the Project Proponent has submitted that under excavation activity no damage has been occurred, the impact of storage of excavated soil is slight, impact on mining activities and allied operations like drilling, blasting, transportation etc. is slight which is irrelevant and the EAC asked the Project Proponent to revisit the methodology of the damage assessment carried out.

The EAC advised the Project Proponent to consider all the attributes of the environment by taking into account of production of 2,53,278 Tonnes without EC and asked the Project Proponent to refer the ratings of European Union (EU), Hand Book 28 or European Environment Agency (EEA) w.r.t air environment, consumption of water during violation period w.r.t Ministry of Jal Shakti, (Central Ground Water Authority) Notification S.O 3289 (E) dated 24<sup>th</sup> September, 2020, Noise w.r.t Occupational Safety and Health Administration (OSHA) and plantation w.r.t Guidelines of Central Pollution Control Board (CPCB). The EAC asked the Proponent to rework on the EMP cost saved and the economic benefits derived to violation. The EAC observed that the instant project is located at a distance of 1.70 km, N from the interstate boundary of Jharkhand-Odisha. Hence, the Project Proponent needs to submit the list of public participated in the public hearing from Odisha and Jharkhand. The EAC noted that the Project Proponent has submitted the public hearing action plan for five years and asked the Project Proponent to revise the public hearing action plan with a timeline of 3 years in a verifiable and monitorable manner. The EAC also noted the budget of the EMP is not tallying and it is more generalized and asked the Proponent to revise with more specific EMP cost.

The EAC opined that the Consultant could not able to bring out the technical details and asked the Consultant to revise the presentation. Based on the above discussions held, the EAC **deferred** the proposal for want of following additional information: -

- i. The Project Proponent needs to revisit the damage assessment to the following attributes as mentioned below: -
  - a) Air Environment: PP needs to use either USEPA/AERMOD or CMPDI emission figures to assess the damage based on the emission rates in kg (EU 28 HANDBOOK/EEA) on annualised basis and total damage value shall be arrived.
  - b) Water Environment: PP needs to refer Ministry of Jal Shakti, (Central Ground Water Authority) Notification S.O 3289 (E) dated 24<sup>th</sup> September, 2020 for computing the damage occurred during operation period from the year 1993-94 to 2010-11 and Non provision of surface water structures

- including toe drains/garland drains and toe walls for the dumps and as well around the quarry and their total cost saved shall also be brought out.
- c) Ecology and biodiversity: Non-compliance of plantation for the past period and 10% of cost saved due to noncompliance of Wildlife Conservation plan budget for past period shall also be added.
  - d) Damage due to Noise and vibration if exceeded the norms.
  - e) Economic benefit accrued due to the production of 2.53 lac tons under violation and cost saved in EMP expenditure during this period @ 3% of the total shall also be included.
  - f) The damages so arrived at shall be covered under Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan and shall be budgeted for 3 years and the expenditure shall be specific and monitorable.
- ii. The Project Proponent needs to revise the Land Use/Land Cover classification of the mine lease area and surface features like roads, nallah/streams, existed in the area should be shown on historical imagery during the pre-mining operation and the current status.
  - iii. The Project Proponent needs to revise the air quality modeling and shall carry out the cumulative impact assessment by considering all the mining activity including the transport scenario of the mines, crusher and Shri Jagannath Steel & Power Ltd. found adjacent to the mine lease area. The Project Proponent shall consider the peak production capacity of this mine for the prediction of air quality modeling. The control case and worst-case scenario needs to be demonstrated with controlling factor and GLCs values for all the pollutants needs to be clearly mentioned. The input parameters used for the modeling also needs to be submitted.
  - iv. The Project Proponent needs to submit the measures taken for protection of seasonal nallah flowing within the mine lease area. PP also needs to submit the time bound action plan for developing three tier plantation on both the sides and also by keeping a safe distance of 50m on either side.
  - v. The Project Proponent needs to revise the compliance of the NEERI conditions with time bound action plan.
  - vi. The EAC observed that the baseline data was carried out during October to December, 2019 and is almost 3 years old and hence the EAC asked the Project Proponent to revalidate with one-month baseline data.

- vii. The EAC opined that the Wildlife Conservation Plan needs to be revisited since it was approved on 05.02.2011 and the Project Proponent also needs to submit the satisfactory compliance of Wildlife Conservation Plan approved on 05.02.2011 from the Forest Department.
- viii. The Project Proponent needs to revise the EMP cost in a more specific manner.
- ix. The Project Proponent needs to submit the water balance for monsoon and non-monsoon period along with past consumption during operation period from the year 1993-94 to 2010-11.
- x. The Project Proponent needs to public hearing action plan with a timeline of 3 years in a verifiable and monitorable manner. The budget for the public grievances shall be a minimum of @ 2% of the capital expenditure and shall be spent in 3 years with specific and monitorable expenditure for the neighbourhood and provided under EMP.
- xi. The EAC noted that the instant project is located at a distance of 1.70 km, N from the interstate boundary of Jharkhand-Odisha. Hence, the Project Proponent needs to submit the list of public participated in the public hearing from Odisha and Jharkhand.
- xii. The Project Proponent needs to submit the normative and peak total excavation in tonnes including mineral, overburden, inter-burden, waste, top soil, rejects etc. to be handled annually and the management of topsoil and waste needs to be properly addressed. The mineable reserves, blocked reserves need to be mentioned along with the life of mine. Waste to be generated during the entire life of mine and details of the location of dumping/backfilling area need to be submitted.
- xiii. The Project Proponent needs to revise the specific diesel consumption of 785 liters/day to liters/tonnes. PP also needs to submit the action plan for promotion of Solar Energy.
- xiv. The Project Proponent needs to submit the letter from the Principal Chief Conservator of Forest (PCCF) to confirm whether there is any presence of Elephant corridor in the study area or not?
- xv. The EAC noted that the Project Proponent has allocated the budget under Corporate Environmental Responsibility which is not acceptable. Hence, the Project Proponent needs to revise the budget as per Ministry's OM dated 30.09.2020.

- xvi. The Project Proponent needs to submit the current status of the court case filed by the State Govt. in the JMFC Court, Barbil, Odisha vide case no. 115/2013 dated 30/07/2013 U/s 15 of the Environment (Protection) Act, 1986.
- xvii. The Project Proponent needs to submit the copy of the State Govt. of Odisha vide order no. III(A)SM07/20139(pt)/10423/SM, Bhubaneswar dated 07.12.2021 with respect to extension of validity of mine lease. PP also needs to submit the copy of Forest clearance dated 26.02.1998 and 21.11.2013, Demand Notices raised from the Office of the Deputy Director of Mines, Joda Circle and Payment Proof of the demand raised against Mining Plan/CTO vide dated 31.01.2019 and 05.03.2019 in PARIVESH portal.

**1.5 Terms of Reference of M/s Rain Cements Limited (RCL) for enhancement of Limestone production from 1.60 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, located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana – [File No: J-11011/152/2008-IA.II(I), Proposal No: IA/TG/MIN/256638/2022; Consultant: Vimta Labs Limited] - Terms of Reference (Expansion) – reg.**

The instant proposal was already considered in the 2<sup>nd</sup> EAC (Non-Coal Mining) Meeting held during 16<sup>th</sup> – 18<sup>th</sup> August, 2022 and based on the discussions held, the EAC **recommended** the proposal for grant of Terms of Reference (ToR) of M/s Rain Cements Limited (RCL) for enhancement of Limestone production from 1.60 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, located at Revoor & Mellacheruvu Villages, Mellacheruvu Mandal, Suryapet District, Telangana for undertaking detailed EIA/EMP study subject to the specific conditions in addition to the standard ToR conditions applicable for non-coal mining projects.

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**List of members of Expert Appraisal Committee participated through VC**

<b>S.No</b>	<b>Member Name</b>	<b>Member Address</b>	<b>Designation</b>	<b>5<sup>th</sup> Sept., 2022</b>
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat India, 382 008	Chairman	Yes
2	Sh. Niranjn Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, India, 302018	Member	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	Yes
4	Shri. Avijit Ghosh (CMD-Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A-604 Shahadeo Tower, P.P. Compound, Ranchi 834001, Jharkhand	Member	Yes
5	Shri. Bandi Ramchandra Reddy (CMD-South Eastern Coalfields Limited)- (Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	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
7	Prof. Devesh Walia, Professor, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	Yes



Minutes of 3<sup>rd</sup> EAC (Non-Coal Mining) meeting held on 5<sup>th</sup> September, 2022

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

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