

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

SUMMARY RECORD OF 23RD MEETING OF THE COMMITTEE OF THE RE-CONSTITUTED EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006.

The 23rd meeting of the Re-Constituted Expert Appraisal Committee (EAC) for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment, Forest and Climate Change was held during 5-7 December, 2023 through video conference. The list of participants is annexed herewith. After login of the Committee Members through video conference link provided by NIC discussion on each of the Agenda Items was taken up ad-seriatim.

(1.0) Deliberation & Circulation on the Minutes of 22nd EAC (Non-Coal Mining) meeting held during 14-15 November, 2023:

The minutes of the 22nd EAC meeting held during 14-15 November, 2023 were placed before the members of the EAC. The EAC noted that the Project Proponent vide email dated 24.11.2023 requested for the following corrigendum as given in table below. The Project Proponent also submitted the map indicating the six no. of old pits along with their dimensions.

S. No	Reference as per 22 nd EAC minutes of meeting (Parivesh 1.0)	Clause as per 22 nd EAC minutes of meeting	Corrigendum Sought by the Project Proponent	Recommendation of EAC in its meeting held during 5-7 December, 2023
1	Agenda no: 2.2, Point No: 3, 1 st Para, Line 14, Pg. No: 51	There were 6 old pits over an area of 1.942 ha existed within the mine lease area. The Project Proponent also informed the EAC that the State Govt. during the auction has informed that the old excavated areas shall be excluded during the grant of mining lease and accordingly mining plan was prepared by excluding the area of 1.942 ha and the	There were 6 old Pits over an area of 7.57 ha existed within the mining lease area including an area held under ML No 82/2000 over an area of 1.942 Ha. The Project Proponent also informed the EAC that the State Govt. during the auction has informed that the old excavated area held under ML No 82/2000 over an	There were 6 old Pits over an area of 7.57 ha existed within the mining lease area including an area held under ML No 82/2000 over an area of 1.942 Ha. The Project Proponent also informed the EAC that the State Govt. during the auction has informed that the old excavated area held under ML No 82/2000 over an area of 1.942 Ha

	same was approved by Indian Bureau of Mines vide letter dated 27.07.2023.	area of 1.942 Ha shall be excluded during the grant of Mining lease. Accordingly Mining plan have been prepared keeping 1.942 ha undisturbed and the same was approved by Indian Bureau of mines vide letter dated 27.07.2023.	shall be excluded during the grant of Mining lease. Accordingly Mining plan have been prepared keeping 1.942 ha undisturbed and the same was approved by Indian Bureau of mines vide letter dated 27.07.2023.
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Day 1: 5th December, 2023 (Tuesday)

1.1 Sagmania Limestone Mine of M/s Birla Corporation Ltd with Limestone production capacity of 4.9 MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha, located at Villages - Barikalan, Baraj, Puraini, Bathiakhurd, Bharjunakalan, Nimi & Naina, Tehsil Raghurajnagar, District- Satna, Madhya Pradesh - [File No: J-11015/271/2006-IA.II(M), Proposal No: IA/MP/MIN/451887/2023; EIA Consultant: M/s Perfect Enviro Solutions Pvt. Ltd.]— Environmental Clearance (Violation under SOP dated 07.07.2021)

The instant proposal is for grant of Environmental Clearance for M/s Birla Corporation Limited for mining of Limestone in Sagmania Limestone Mine with Limestone production capacity of 4.9 MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha, located at Villages- Barikalan, Baraj, Puraini, Bathiakhurd, Bharjunakalan, Nimi&Naina, Tehsil Raghurajnagar, District- Satna, Madhya Pradesh.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 24°39'52.6"N to 24°37'4.5"N and Longitude: 80°55'10.6"E to 80°51'44.5" E. The mine lease falls under the Survey of India Toposheet No. 63D/14 and falls in Seismic zone II.
- iii. Details of Previous Environmental Clearance (EC):
 - a) The Project Proponent submitted that initially Environmental Clearance was obtained vide EC Lr. No. J-11015/123/2005-IA.II(M) dated 17.09.2007 for Limestone production capacity of 3.3 MTPA over an area of 939.78 ha.

- b) Then, Project Proponent obtained Environmental Clearance vide EC Lr. No J-11015/271/2006-IA.II(M) dated 27.12.2007 for an expansion of Limestone production from 3.3 MTPA to 4.9 MTPA by opencast mechanised method involving total lease area of 939.78 ha.
- iv. Details of Terms of Reference (ToR):
- a) The Project Proponent obtained Terms of Reference (ToR) vide letter dated 16.06.2023 for Sagmania Limestone Mine of M/s Birla Corporation Ltd with Limestone production capacity of 4.9MTPA, OB removal: 7.86 MTPA, Soil removal: 0.30 MTPA (Total Excavation: Excavation: 13.06 MTPA) along with the existing 2 no. of crushers i.e., 1200 TPH and 800 TPH capacity in the mine lease area of 852.50 ha under Ministry's SOP dated 07.07.2021 for undertaking detailed EIA/EMP study.
- v. Land Use/Land Cover of the Mine Lease Area:

Private land	702.27 Ha
Government land	150.23 ha
Total Mining lease area (MLA), ha	852.50 ha
Private land for crusher, workshop & other infrastructure outside the MLA	NA

- vi. Details of Mine Lease:
- a) The Project Proponent submitted that initially mining lease was granted over an area of 2469 Ha (6101 acre) from Govt. of MP, Mineral Resource Department for a period of 20 years from 19.10.1956 to 18.10.1976.
- b) The 1st renewal of mining lease was renewed vide order no. F-3-182/76/12/6 dated 22.04.1977 over an area of 1000 Ha for a period of 20 years from 19.10.1976 to 18.10.1996.
- c) Project Proponent submitted that the application for 2nd renewal of mine lease was submitted on 13.10.1995 and 2nd renewal of mining lease was granted by Govt. of Madhya Pradesh vide Order no. F-3-234/97/12/1 dated 13.10.2010 over an area of 852.50 Ha for a period of 20 years from 19.10.1996 to 18.10.2016. During second renewal of mining lease, the State Govt. reduced the mining lease from 939.78 ha to 852.50 ha.
- d) Then, the Project Proponent submitted that the application for 3rd renewal application was submitted on 31.07.2015 and 3rd renewal of mining lease was granted by the Govt. of Madhya Pradesh vide Order no. F-19-5/2015/12-1, Bhopal dated 12.03.2015 stating that as per provisions of the Mines and Minerals (Development and Regulation) Amendment Act, 2015, 8 (A) (5), the period of lease granted before the date of commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2015 (10 of 2015), where mineral is used for captive purpose, shall be extended and be deemed to have been extended up to a period ending on the 31st March, 2030 with effect from the date of expiry of the period of renewal last made or till the completion of renewal period, if any, or a period of fifty years from the date of

grant of such lease, whichever is later, subject to the condition that all the terms and conditions of the lease have been complied with. The last renewal is deemed renewed from 18.10.2016 to 31.03.2030.

vii. Mining plan details:

Review of Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines	Letter No.	MP/Satna/LST/RMP-22/2020-21
	Date	24.12.2020
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	852.50
	Validity	31.03.2026
Mining Parameters	Quantitative Description	
Method of Mining	Opencast fully mechanized mining	
Drilling/Blasting	Fully Mechanized opencast using HEMM and deep hole drilling.	
Geological Reserves	130.9 MTPA	
Mineable Reserves	75.35 MTPA	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation-13.06 MTPA (Comprising 4.9 MTPA of limestone, 7.86 MTPA of OB and 0.30 MTPA of Soil)	
Life of mine	16 Years	
Mine Bench Height & Bench Width	The height of the bench is 6 - 9 m The width of the bench is 15m-20m on average.	
No. of Mine Benches	2	
Existing Depth, m bgl	average 15 m	
Ultimate Depth of Mining, m bgl	Avg 56 m (up to 255m RL)	
Ground Water Table, m bgl	20 m	
Details of ground water intersection	The water table in the core zone varies between 25m-30m bgl (285m – 280m RL) during pre-monsoon and 20-25m bgl (290m – 285m RL) during post monsoon. The current mine working has not intersected ground water table and complied with the condition as stipulated under specific condition (iii). However due to some land constraints, quality issue & further exploration has revealed that second band limestone exist below ground water table and accordingly mining plan has been revised with same production capacity of 4.9 million TPA.	
Individual bench slope	80° to 85° from horizontal	
Overall pit slope	<45°	
Details of existing/ proposed Crusher	Existing 2 no. of crushers, capacity are 1200 TPH and 800 TPH	
Mineral Beneficiation	NA	
RoM output size	-25 mm	
Transportation details including	The broken material will be transported using 9	

capacity of dumper/tipper, mode of transport and distance	no.s of 60 Tons capacity dumper. The mineral after crushing is transported through a conveyor belt and bi-cable ropeway to the Satna Cement Works of M/s. Birla Corporation Ltd located at 4.05 Km in SW direction, for manufacturing of cement.
Generation of Topsoil/OB, Mineral Rejects/ Waste & its Management during plan period & conceptual period	About 7.86 MTPA of OB and 0.30 MTPA of Soil will be generated. The OB will be dumped temporarily and later on it will be used for backfilling. The generated topsoil will be stacked separately and will be used for plantation.

viii. Water requirement:

Total water requirement	504 KLD	Plantation	280 KLD
		Drinking & Domestic	49 KLD
		Mining Operation	160 KLD
		Workshop	15 KLD
Source	406 KLD will be supplied by pit water. Ground water of 49 KLD used for drinking and domestic purposes will be taken from bore-well and remaining 49 KLD treated water (workshop & Domestic) used for plantation and mining operation.		
Permission for withdrawal/ intersection along with details of grant and its validity	Project Proponent submitted the No Objection Certificate (NOC) for Groundwater abstraction obtained vide CGWA/NOC/MIN/ORIG/2021/13750 for abstraction of 290.0 m ³ /day and dewatering of 329.0 m ³ /day which is valid from 16/11/2021 to 15/11/2023.		
Additional information (if any)	Accumulated rain water in the pits will also be used for dust suppression and plantation.		

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

Particulars	Particular's Name	Distance & Directions
Village	Puraini	0.11 km, E
	Umari	0.31 km, W
School	Amit Jaiswal Ahari Tola school	0.52 km, SSW
Town	Satna	5.1 km, SW
Highway	Satna- Semariya Road Polytechnic Road	81 m from the pit limit 2.93 km, SSW
Railway Station/Railway line	Sakaria railway station	1.69 km, SE
Water Bodies	Badkhar Nala	1.26 km, SSE
	Talab near Chakmurar	2.48 km, SE
	Pond near Muran	3.83 km, SE
	Magardaha N	5.08 km, NW
	Chuhar N	5.20 km, NW
	Satna River (Not showing Topo map)	5.22 km, SE
	Tons or Tamasa River (Not	5.29 km, SE

	Showing Google Earth) Sindhi Comp Talab Simrawal Nadi Narayan Talab Bagha Pond (Talab) Gahira N Jagat Dev Talab Hathia N Rani Talao Choker N Lagna Nala Dhawari Talab Canal near Ganasha	5.30 km, SW 5.49 km, NE 6.03 km, SSW 6.23 km, SW 6.51 km South 6.83 km, SW 7.28 km, NNE 7.55 km, SSE 7.80 km, N 8.04 km, NNW 9.45 km, SW 9.55 km, SE
Forest	Reserved Forest near Khamharia Reserved Forest near Bhatpurwa Reserved Forest near Khamhariyapayasin Jamori Reserved Forest Reserved Forest near Khajurehara Reserved Forest near Bandarkha Reserved Forest near Hinauta Reserved Forest near R F Majhiar Reserved Forest near Majhiar Reserved Forest near Chulhi	2.74 km, SE 2.93 km, SE 3.79 km, SE 3.95 km, SE 6.23 km, SE 8.10 km, SE 8.15 km, SE 8.53 km, SE 8.91 km, SE 9.19 km, SE
Heritage Site	NA	

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

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	The Project Proponent has submitted the letter from the Forest Divisional Officer vide letter dated 30.06.2023 stating that the Sagmania Limestone Mine does not include the forest land.
National Park	No	The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Wildlife) vide letter dated 30.10.2023 stating that there is no protected area located within 10km of the study area.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ)/Eco- Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	The Project Proponent has submitted the list of flora and fauna authenticated by the Divisional Forest Officer, Satna. There is one Schedule – I Species found in the study area namely Pea fowl	
Wildlife Conservation Plan		

	<p>(<i>PavoCristatus</i>).</p> <p>The Project Proponent has submitted the letter from the Office of the Principal Chief Conservator of Forests (Wildlife) vide letter dated 30.10.2023 stating that the Wildlife Conservation Plan recommended by Chief Conservator of Forest, Rewa and Forest Divisional Officer for a period of 5 years with a budget of Rs 5.0 Lakhs is approved.</p>
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xi. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	147.96 Ha 3,49,900 no.s Survival rate: 85 %
Budget for green plant & plantation till the end of life of mine.	Rs 164.55 Lacs
Budget for nursery	Nil
Details of existing plantation and its survival rate	Till date, about 2.73 lacs saplings have planted in Mine Lease area with Survival rate of 85 %
No. of tree cuts in the mine lease area and compensatory afforestation	Nil

xii. Baseline data details:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)			
Period of baseline data collection	October 2022- December 2022		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-monsoon		
Predominant Wind direction (From)	North-West		
Ambient Air Quality (no. of locations) and results	8 Locations. Result summary: PM ₁₀ : 44.0 µg/m ³ - 79.1 µg/m ³ PM _{2.5} : 24.3 µg/m ³ - 45.1 µg/m ³ SO ₂ : 6.1 µg/m ³ - 11.0 µg/m ³ NO ₂ : 12.8 µg/m ³ - 25.9 µg/m ³		
Noise level (no. of locations) and results	10 Locations Day Time (Lday) noise level: 55.7 dB (A) –73.4 dB (A) Night Time (Lnight) noise level: 43.7 dB (A) –66.3 dB (A).		
Water Quality (no. of locations) and results	Parameters	Surface water (4 locations)	Ground water (8 locations)
	pH	7.60-7.84	6.9-8.03
	Total Dissolved Solids, mg/l	244-380	322-1650

	Chloride as Cl-, mg/l	26-72	42-192
	Total Hardness, mg/l	160-252	184-820
	DO, mg/l	4.8-5.8	-
	BOD, mg/l	4-7.9	-
	COD, mg/l	16.0-32.0	-
Soil Quality (no. of locations) and results: 8 Locations	Parameters	Observed Values	
	pH	6.71-7.84	
	Electrical Conductivity (µS/cm)	88.7-860	
	SAR, meq/100 gm	5.7-17.2	
	Available Nitrogen, mg/kg	64.4-169.4	
	Available Potassium, mg/kg	16.3-73.9	
	Available Phosphorus, mg/kg	10.4-18.6	
Hydro geological study and results	<p>The Project Proponent submitted that the Comprehensive Hydrogeological Report with Ground Water Modelling for Sagmania Limestone Mines was carried out by M/s Akshat Ground Water Consultant Service. The industry falls in Sohawal block which is under the Semi-Critical category as per GEC-2022 published by CGWB. The field work was carried out during the month of April and May, 2023. As per conducted long duration Aquifer Performance Test in core and buffer zone, the average hydraulic parameters of the aquifer namely Transmissivity is 597.7 m²/day, Hydraulic Conductivity is 6.07 m/day, Specific Yield is 2.95 %, Hydraulic Gradient is 1/450 and Radius of Influence is 130 m.</p> <p>The Project Proponent also submitted that overall, hydrogeological, hydro-chemical & impact assessment studies reveal that mining activities of the project will not have any adverse impact on the groundwater regime as ground water abstraction in 5 years would be 1.72 mcm including dewatering; Whereas, recharge to ground water in 5 years would be of the order of 3.13 mcm which is more than 150 % of ground water abstraction and hereby, there will be positive impact on ground water regime on water level, water quantity as well as water quality.</p>		
Traffic study (no. of locations) and results	<p>The Project Proponent submitted that as the limestone is being transported through conveyor belt/ropeway to its own Satna Cement plant from the mine site, there shall not be any</p>		

	movement of mine dumpers/vehicles on NH-39 and Satna-Semariya Road.
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xiii. Public Hearing (PH) Details:

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	"Nav Swadesh Newspaper, DainikBhaskar Newspaper, Patrika Newspaper, and Deshbandhu Newspaper Satna" on July 30, 2023.
Date of PH	01.09.2023
Venue	ShaskiyaPrathmikShala, HarijanBasti, ShivpurvaMaidan, Tehsil- Raghuraj Nagar, District- Satna, State- Madhya Pradesh
Chaired by	Shri Rishi Pawar, Additional Collector, Satna
Main issues raised during PH	Opening of technical schools, training based employment, cowshed, utilization of water from mine, noise pollution, playgrounds, etc.,
Budget proposed for addressing issues raised during PH over 3 years	Rs 474.29 Lakhs

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

Particulars	Details of Letter along with date of grant and validity	
Consent to Establish (CTE)	CTE was granted by the State Pollution Control Board vide letter no. 9002/TS/Mine/MPPCB/2007 dated: 26.11.2007.	
Consent to Operate (CTO)	CTO renewal was obtained from State Pollution Control Board vide consent No: AW-57721 dated 03/03/2023 and is valid up to 31.03.2024.	
Certified Compliance Report and Inspection date	The Project Proponent submitted that the Certified Compliance Report was issued by the Regional Office (RO) vide F.No. 3-36/2012 (ENV) dated 18.10.2023 and inspection was carried out by RO on 15.09.2023.	
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	The Project Proponent submitted the certified past production details vide LrNo. 683/Khanij/2022 dated 23.03.2022 from the period 1993-94 to 2020-21 and vide letter dated 24.05.2023 for the period 2021-22 to 2022-23.	
	Year of Production	Production in Tons
	1993-94	2498450
	1994-95	2471960
	1995-96	2370930
	1996-97	2669160
	1997-98	2491885
	1998-99	2017265

	1999-00	2460700
	2000-01	2620610
	2001-02	2469135
	2002-03	2524170
	2003-04	2813550
	2004-05	2729460
	2005-06	3039090
	2006-07	2941980
	2007-08	2829510
	2008-09	2847080
	2009-10	2571816
	2010-11	2315699
	2011-12	3134894
	2012-13	3258523
	2013-14	3346320
	2014-15	3720035
	2015-16	3511498
	2016-17	3239755
	2017-18	3279147
	2018-19	3105737
	2019-20	3500985
	2020-21	2811546
	2021-22	2995675
	2022-23	2899769
Details of Violation	<p>The Project Proponent initially obtained Environmental Clearance on 17.09.2007 and 27.12.2007 and the PP operated the mines without obtaining Environmental Clearance from 1994 to 2006 and also PP obtained the 2nd renewal of mining lease on 13.10.2010 and at this stage PP required to obtain EC as per Ministry's OM No. J15012/35/2007-IA.II(M)-Part dated 2nd July, 2007. However, project proponent has not obtained the EC at the time of renewal of mine lease. The Committee also noted that the PP has been operating the mines from 13.10.2010 without obtaining amendment in Environmental clearance from change in reduction of mine lease area from 939.78 ha to 852.50 ha. Thus, the Committee was of the view that the instant case attracts the Hon'ble Supreme Court Judgment dated 02.08.2017 in W.P.C 114 of 2014 in the matter of Common cause Vs Union India and violation of EIA Notification, 2006.</p>	

- xv. Ecological Damage Assessment, Natural Resource and Community Resource Augmentation Plan: -

The Project Proponent has submitted that the total budgetary provision with respect to Remediation Plan and Natural & Community Resource Augmentation Plan is Rs.79.0 Lakhs. The breakup of the Ecological Damage Assessment, Natural Resource and Community Resource Augmentation Plan are as follows:-

a) Damage Remediation Plan:

S. No	Component	Activity Proposed	Proposed Budget (in Rs)
1	Air Environment	Providing improved water sprinkling system along the roadside, installation of Anti smog gun in the nearby roads	10,00,000
2	Improvement in Fertility	1. Distribution of manure and Improved variety seeds 2. Providing Equipment for Mechanized Farming by modern methods	5,00,000
3	Noise Environment	Appropriate Tree Plantation (especially noise reducing species) along the periphery	4,00,000
4	Ecology & Biodiversity (Land, Flora & Fauna)	Plantation in nearby villages along community buildings, barren land	5,00,000
Total			24,00,000

b) Natural Resource Augmentation Plan:

S. No	Natural Resource	Augmentation Plan & Activity Proposed	Proposed Budget (in Rs)
1	Water component	1. Improving rain water storage facilities. 2. Desilting of nearby Village tanks 3. Optimum utilization of water stored in mined out pits and surface runoff during monsoon 4. Watershed Activities	5,00,000
2	Land component	1. Retaining wall to be provided to the vulnerable areas 2. Strengthening of ephemeral for checking channel scouring/ side erosion	10,00,000
3	Socio economic/ Community resources	1. Construction of Toilets in nearby villages 2. Distribution of renewable	10,00,000

		sources of energy like solar lamps, solar water heaters, Solar street	
Total			25,00,000

c) Community Resource Augmentation Plan:

S. No	Resource	Augmentation Plan & Activity Proposed	Proposed Budget (in Rs)
1	Education	1. Supporting Education and encouraging Girl Education 2. Setup of Smart class board and Drinking water Facilities	5,00,000
2	Infrastructure	1. Development of parks and roads 2. Renovation & Construction of Wall in Govt. school 3. Construction of Toilets in the Govt Schools	10,00,000
3	Human Resource Development	1. Training for processing of local agriculture/horticulture produce 2. Women empowerment by creating self help groups for livelihood generation	5,00,000
4	Medical	1. Extending Medical facilities by health camps 2. Health awareness programmes	10,00,000
Total			30,00,000

d) Summary of Ecological Damage Remediation, Natural & Community Resource Augmentation Plan: -

S. No	Activity Proposed	Total (in Lakhs)
1	Cost of Damage Remediation Plan	24.0
2	Natural Resources Augmentation Plan	25.0
3	Community Resources Augmentation Plan	30.0
	Total	79.0

xvi. Penalty provisions as per SOP dated 07.07.2021:

S. No	Particulars	Cost (Rs Crores)	Penalty imposed as per SOP	Penalty to be paid (Rs Crores)
1	Cost of the Project	24.24	1% of Cost of the Project	0.24
2	Total Turnover on excess	22.47	0.25 % of Turnover	0.05

	production during period of Violation		on excess production	
	Total			0.29

xvii. The Project Proponent has submitted that purchase of land will be done preferably on mutually agreeable basis or in compliance with the provisions of Madhya Pradesh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2015.

xviii. Court case details:

Court Case, No and its present status	The Project Proponent has submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
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xix. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 50 bearing no: P 059208 dated 31.03.2023 stating that they will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors'.
Undertaking by Consultant in EIA/EMP report	The EIA Coordinator has given undertaking that report for project "Sagmania Limestone Mine" (852.5 Ha.) by M/s Birla Corporation Ltd is prepared in accordance with a robust quality management system adopted by EIA consulting organization for the EIA process and the prescribed EIA report has been complied with the data submitted is factually correct.
Plagiarism checked on 09.11.2023	The EIA Coordinator has certified that the EIA report has been evaluated using online/In-house software Duplicheckerviz The report produced has been analysed by the system and based on it, the EIA report produced in accordance with good scientific practice.

xx. Details of Project cost and Employment:

Particulars	(Rs. In Crore)
Project Cost	Proposed (Expansion): Rs 16.0 Crores
EMP Cost	Capital Cost: Rs 258.4 Lakhs Recurring Cost: Rs 66.1 Lakhs/annum
Employment	333 No.s

3. Observation and Recommendation of the EAC:

The Project Proponent/EIA Consultant presented the KML file to indicate the surface features in the study area of 10 km radius. The Project Proponent showed the boundary of the mine lease area of 852.50 ha and informed the EAC that presently mining is being carried out in three places namely A quarry, B block and N1 block. The mined out Limestone is being crushed at the crusher installed within the mine lease area and then the crushed Limestone is being transported to the Cement Plant located at a distance of 4.05 km in SW direction. The EAC asked the Project Proponent to show the area reduced from the mine lease area. The EAC on viewing the KML file noted that the in part of the area mining activity was carried out. The EAC asked the Project Proponent that whether final mine closure plan for the reduced area was approved by Indian Bureau of Mines (IBM) or not. The Project Proponent informed the EAC that they will get approval from the IBM and will submit the certificate in this regard. The EAC asked the Project Proponent to submit a detailed note on the rehabilitation work carried out in the reduced area and the protection measures taken and also to clarify whether the same has been taken into consideration while approving the Review of Mining Plan dated 24.12.2020 or not.

The Project Proponent informed the EAC that new mine pit is proposed on the north western side of the mine lease area. The EAC asked about the status of land acquisition. The Project Proponent informed the EAC that about 25 ha of land is in process for purchasing. The EAC asked the Project Proponent to submit the table indicating the total land required for mining activity under acquisition, land already in possession, remaining area needs to be purchased along with the timeline and the compensation given. The Project Proponent informed the EAC that the groundwater will be intersected. The proposed cost of the project is Rs 16 Cr. The EAC asked the Project Proponent to submit the exact existing and proposed project cost. The Project Proponent informed the EAC that at the conceptual stage the total mined out area will be 728.12 ha, out of which 149.61 ha will be backfilled, 553.51 ha will be converted into water reservoir and 25.0 ha will be developed under plantation on benches. The EAC asked the Project Proponent to submit the land use/land cover analysis for pre violation, post violation, at present and also the conceptual stage..

The Project Proponent showed the past production details for the year 1993-94 to 2022-23. The Project Proponent also informed the EAC that the common cause violation was complied and an amount of Rs 8.42 Cr has been deposited for the same. The EAC asked about the status of the credible action has been initiated or not. The Project Proponent informed the EAC that the credible action has not been initiated and is under process. The Project Proponent informed the EAC that the baseline data was monitored during Post monsoon season i.e, Oct-Dec, 2022. Further, the Project Proponent informed the EAC about 90% of the local people have been employed. The Project Proponent showed the details of plantation plan. The EAC noted that there is a mismatch in figures of the area developed under plantation/green belt. The EAC asked the Project Proponent to submit the exact figures of the plantation from the inception of the mine in a single table. The Project Proponent showed the drone survey of the mine lease area. Then, the Project

Proponent explained about the water management. The EAC noted that the Project Proponent has considered the same run off coefficient for all areas. The EAC asked the Project Proponent to revisit the water management by considering the appropriate run off coefficient.

The Project Proponent presented the public hearing action plan. The EAC noted that the action plan proposed to address the concerns of the public hearing is very generic. The EAC asked the Project Proponent to submit the more precise activities proposed under each component of the public hearing so that the activity might be monitorable. Then, the Project Proponent presented the examination of the action taken report. The Project Proponent presented the penalty provisions as per SOP dated 07.07.2021. The EAC asked the Project Proponent to provide justification for the capital cost after the year 2007. The EAC noted that the Project Proponent has considered only the production for ecological damage assessment. The EAC asked the Project Proponent to include the total excavation for ecological damage assessment covering the balance period of six months.

The EAC noted that the methodology adopted for calculation of damage cost due to emission load is not proper. The EAC asked the Project Proponent to consider the inflation variation between 2015 and 2023 and then Purchasing Power Parity Index to be applied to convert into rupees. The EAC also asked the Project Proponent to include the water consumption by the colony and to reconsider the quantities used in domestic and industry and also to calculate the environmental compensation as per CGWA guidelines. The EAC observed that the mine lease area is surrounded by the agricultural land and asked the Project Proponent to calculate the agricultural production loss due to emission. The EAC asked the Project Proponent to consider the avoidance cost method with regards to greenbelt and also to consider the domestic waste for damage assessment. Non utilization of topsoil shall also be taken into consideration. The EAC also asked the Project Proponent to consider the cost saved method for the violation period with regards to Wildlife Conservation Plan and Occupational health and safety. Further, the EAC asked the Project Proponent to include the EMP cost saved for the violation period. The EAC asked the Project Proponent to submit the action plan to increase the plantation along the crusher area and workshop area. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to revisit the ecological damage assessment by considering the following:-
 - a) The total material handled and their emissions shall be considered and accordingly table needs to be revised.
 - b) The EU 28 rates shall be arrived by updated inflation and Purchasing Power Parity (PPP) index as of 23.
 - c) Water: Total water abstracted/consumed including colony consumption shall be considered for computation including the ECR(gw) as per notification and deterrent factor in the absence of NOC from CGWA.

- d) E&B: Deficiency in Greenbelt of safety zone to the extent of 11.38 ha shall be computed for EC/Damage @ Rs: 300/per plant @ 2500 trees per Ha. Cost saved shall be considered for the operations during violation period for without approval from Forest dept for the Wildlife Conservation & Management Plan.
 - e) Dump and muck management: Cost saved in non provision of surface water management structures like GD, TD, TW, CW/CD and Settling Pond etc shall be considered.
 - f) Agricultural production loss due to emission.
 - g) Non-utilization of topsoil.
 - h) Saving in Domestic Waste management.
 - i) Cost saved in OH&S Management expenditure if any.
 - j) Cost saved in EMP if any shall be considered at the rate of 10% of the total cost saved.
 - k) The period of violation shall be considered up to Sep 2007.
- ii. The Project Proponent needs to submit the land use/land cover analysis for pre violation, post violation, at present and also the conceptual stage.
 - iii. The Project Proponent needs to submit a detailed note on the rehabilitation work carried out in the reduced area and the protection measures taken and also to clarify whether the same has been taken into consideration while approving the Review of Mining Plan dated 24.12.2020 or not.
 - iv. The Project Proponent needs to submit the certificate/final mine closure plan from Indian Bureau of Mines (IBM) for the reduced area.
 - v. The Project Proponent needs to submit the exact figures of the plantation from the inception of the mine in a single table in a comprehensive manner.
 - vi. The Project Proponent needs to rework the water balance for monsoon period and as well non monsoon period.
 - vii. The Proponent needs to provide justification/methodology to achieve the concept of zero discharge.
 - viii. The Project Proponent needs to submit the action plan to increase the plantation along the crusher area and workshop area.
 - ix. The Project Proponent needs to submit the more precise and specific activities proposed under each component of the public hearing so that the activity should be monitorable.

- x. The Project Proponent needs to give justification for Capital expenditure of Rs 24.43 Cr and Rs 72.28 Cr. The Project Proponent also needs to submit the exact existing and proposed project cost.
- xi. The Project Proponent needs to revisit the Hydro geology report w.r.t annual surface water development and its management by considering the appropriate run off coefficient.
- xii. The Project Proponent needs to submit the table indicating the total land required for mining activity under acquisition, land already in possession, remaining area needs to be purchased along with the timeline and the compensation given with supporting documents.
- xiii. The Project Proponent needs to submit the copy of the examination of the action taken report issued by the Regional Office, MoEF&CC as shown during the meeting.
- xiv. The Project Proponent needs to submit the status of the credible action under E(P)A, 1986.
- xv. As informed during the meeting, the Project Proponent needs to submit the copy of the demand notice issued by the Dept. of Geology and Mining and the proof of payment made against the demand notice in pursuant to the order of the Hon'ble Supreme Court dated 02.08.2017.
- xvi. The Project Proponent needs to submit the status of No Objection Certificate submitted to CGWA.

1.2 Amendment in Environment Clearance dated 09.08.2016 w.r.t total excavation and to include a crusher of 500 TPH for Lakshmi Cement Limestone Mining Project (M.L. No. 10/ 99) of J K Lakshmi Cement Limited located over an area of 390.625 ha. near villages Basantgarh, Rampura and Rohida, Tehsil – Pindwara, District – Sirohi, Rajasthan – [F.No: J-11015/ 266/ 2013-IA.II (M), Proposal No: IA/RJ/MIN/451978/2023; EIA Consultant: M/s Enkay Enviro Services Pvt. Ltd] – Amendment in EC

The instant proposal is for amendment in EC dated 09.08.2016 w.r.t total excavation and to include a crusher of 500 TPH for Lakshmi Cement Limestone Mining Project (M.L. No. 10/ 99) of J K Lakshmi Cement Limited located over an area of 390.625 ha. near villages Basantgarh, Rampura and Rohida, Tehsil – Pindwara, District – Sirohi, Rajasthan.

2. Observation and Recommendation of the EAC:

The EAC noted that the Project Proponent vide email dated 01.12.2023 requested to defer the proposal due to non-issuance of Certified Compliance Report

from Regional Office (RO), MoEF&CC. Based on the request of the Project Proponent letter dated 01.12.2023, the EAC **deferred** the proposal.

1.3 Proposed Limestone Block-4G-I-A (Auctioned Block) of M/s. JK Lakshmi Cement Limited with Limestone Production Capacity: 5.0 Million TPA, OB/Waste: 1.5 Million TPA, Soil: 0.09 Million TPA (Total Excavation: 6.59 Million TPA) along with installation of 1000 TPH Capacity of Crusher in the mine lease area of 610.863574 ha, located near Villages: Tadawas, Bairawas & Khimsar, Tehsil: Khimsar, District: Nagaur, Rajasthan - [F.No: IA-J-11015/43/2023-IA-II(NCM); Proposal No: IA/RJ/MIN/451395/2023; EIA Consultant: M/s J.M. EnviroNetPvt. Ltd] - Terms of Reference (ToR)

The instant proposal is for mining of Limestone in proposed Limestone Block-4G-I-A (Auctioned Block) of M/s. JK Lakshmi Cement Limited with Limestone Production Capacity: 5.0 Million TPA, OB/Waste: 1.5 Million TPA, Soil: 0.09 Million TPA (Total Excavation: 6.59 Million TPA) along with installation of 1000 TPH Capacity of Crusher in the mine lease area of 610.863574 ha, located near Villages: Tadawas, Bairawas & Khimsar, Tehsil: Khimsar, District: Nagaur, Rajasthan.

2. Observation and Recommendation of the EAC:

The EAC noted that there was a court case w.r.t Letter of Intent (LoI) and asked the Project Proponent about the status of the court case. The Project Proponent informed the EAC that a PIL No: 15367/2023 was filed by villagers of Bairawas and Tadawas, Nagaur stating that the Govt. land should not be granted to the Project Proponent and the next date of hearing was scheduled on 12.12.2023. The EAC noted that since the issue related to Govt. land granted under the LoI dated 09.09.2022 within the mine lease area, the instant proposal may be considered after the next date of hearing scheduled on 12.12.2023 to avoid any discrepancy. The EAC asked the Project Proponent to submit the copy of petition filed by local villagers and latest court orders. Based on the discussions held, the EAC **deferred** the proposal.

1.4 Proposed 3D2 Limestone Block (Auctioned Block) of M/s Ambuja Cements Limited for mining of Limestone with Limestone Production Capacity of 3.0 Million TPA, OB/waste 1.15 Million TPA, Top Soil 0.34 Million TPA, (Total Excavation 4.49 Million TPA) along with Installation of Crusher (2000 TPH) with Wobbler in the mine lease area of 434.08502 ha, located at Villages: Harima & Sarasani, Tehsil and District: Nagaur, Rajasthan – [F.No: IA-J-11015/42/2023-IA-II(NCM); Proposal No: IA/RJ/MIN/452448/2023; EIA Consultant: M/s J.M. EnviroNetPvt. Ltd] – Terms of Reference (ToR)

The instant proposal is for mining of Limestone in 3D2 Limestone Block (Auctioned Block) of M/s Ambuja Cements Limited with proposed Limestone Production Capacity of 3.0 Million TPA, OB/waste 1.15 Million TPA, Top Soil 0.34 Million TPA, (Total Excavation 4.49 Million TPA) along with Installation of Crusher

(2000 TPH) with Wobbler in the mine lease area of 434.08502 ha, located at Villages: Harima & Sarasani, Tehsil and District: Nagaur, Rajasthan.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" of the schedule of the EIA Notification, 2006 as the mine lease area is greater than 250 ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 27°15'07.3426" N to 27°15'56.5901" N and Longitude: 73°51'28.5729" E to 73°53'15.0464" E. The mine lease area falls under the Survey of India Toposheet No: G43B15 and falls in Seismic Zone-II.
- iii. Details of Mine Lease: -

S. No	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Letter of Intent (LoI) for grant of mining lease was issued through e-auction process conducted by the Govt. of Rajasthan.	18.11.2022	Limestone	3 years	Govt. of Rajasthan	434.08502

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

Private land	300.4457 ha
Government land	133.64 ha (Grazing land: 23.40 ha)
Forest Land	-
Total Mining lease area (MLA), Ha	434.0857 ha
Private land for crusher, workshop & other infrastructure outside the MLA	No infrastructure is proposed outside the ML area.

v. Mining plan details:

Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	MCDR-MPC0LST/3/2023-AJM-IBM_RO_AJM
	Date	17.05.2023
	Mineral & (Major/Minor)	Limestone (Major)
	Mine Lease Area, Ha	434.08 ha
	Validity	05 years period from the date of execution of the mining lease.
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanized Opencast Mining Method.	

Drilling/Blasting	<p>Drilling: Drilling will be carried out with the help of hydraulic drill machines equipped with arrangement for wet drilling, dust and sample collection system.</p> <p>Blasting: Controlled blasting will be carried out. No secondary blasting is proposed. Rock breaker will be deployed for breaking the oversized boulders. To minimize the ground vibration as well as fly rock only 100% Non-Electric (NONEL) detonators will be used.</p> <p style="text-align: center;">Drilling & Blasting Parameters</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>S.No.</th> <th colspan="2">Drilling & Blasting Parameters</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Dia of Hole</td> <td>102mm</td> </tr> <tr> <td>2</td> <td>Burden</td> <td>3.0 m</td> </tr> <tr> <td>3</td> <td>Spacing</td> <td>5.0 m</td> </tr> <tr> <td>4</td> <td>Depth of the Hole</td> <td>12.50 m</td> </tr> <tr> <td>5</td> <td>Yield/Mtr</td> <td>37</td> </tr> <tr> <td>6</td> <td>Initiation system</td> <td>NONEL</td> </tr> </tbody> </table>	S.No.	Drilling & Blasting Parameters		1	Dia of Hole	102mm	2	Burden	3.0 m	3	Spacing	5.0 m	4	Depth of the Hole	12.50 m	5	Yield/Mtr	37	6	Initiation system	NONEL
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Geological Reserves	154.55 Million TPA (As on 01.05.2023)																					
Mineable Reserves	110.09 Million TPA (As on 01.05.2023)																					
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	<p>Total Excavation: 4.49 Million TPA</p> <p><u>Breakup of Total Excavation:</u></p> <ol style="list-style-type: none"> 1. Limestone: 3.0 Million TPA 2. Top Soil: 0.34 Million TPA 3. Over Burden: 1.5 Million TPA 																					
Life of mine	40 years (As on 01.05.2023)																					
Mine Bench Height & Bench Width	Bench height: 12 m Bench Width: 15 m																					
No. of Mine Benches	3 benches at conceptual stage																					
Existing Depth, m bgl	It's a greenfield project so, the point is not applicable.																					
Ultimate Depth of Mining, m bgl	270 m from MSL (30 m bgl)																					
Ground Water Table, m bgl	52 - 58 m bgl																					
Details of ground water intersection	The water table in the area is ranging from 52 m to 58 m bgl and the ultimate working depth will be 30 m bgl. Thus, water table will not be intersected during mining.																					
Individual bench slope	75°																					
Overall pit slope	45°																					
Details of existing/ proposed Crusher	Crusher of 2000 TPH will be installed																					
Mineral Beneficiation	Not Applicable																					
RoM output size	Not Applicable																					
Transportation details including capacity of dumper/tipper, mode of	Loading operations will be carried out by hydraulic excavators with bucket capacity of 6.0/4.5 m ³ . ROM will be loaded in to dumpers of 47 T capacities and																					

transport and distance	the material will be transported to the crushing plant and from the crushing plant Limestone will be transported via covered belt conveyor to cement plant of Ambuja Cements Limited (Unit: MarwarMundwa) for manufacturing of Clinker and Cement and open market via roads.
Generation of Topsoil/OB & its Management during plan period & conceptual period.	<u>Top Soil:</u> At conceptual stage, 2.318 million tonnes of top soil will be generated which will be used in Greenbelt development/plantation. <u>Over Burden:</u> At conceptual stage, about 23.411 Million Tonnes of waste generated till the end of mine life will be used for backfilling purpose.
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	-

vi. Water requirement:

Total water requirement	65 KLD	Fresh Water	65 KLD
		Treated water	-
Source	Matasukh Lignite mine, proposed STP plant at nearby village*, ground water and rain water collected in mine sump as and when developed. *Waste water drains will be developed at village Harima to channelize the waste water towards the STP where waste water will be collected and after proper treatment, treated water will be utilized to fulfil water requirement of Limestone mine.		
Permission for withdrawal/ intersection along with details of grant and its validity	To be obtained		

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

Particulars	Particular's Name	Directions (Approx.)
Nearest Village	Harima	Harima Village located at Lease boundary (in West Direction)
Nearest Town	Jayal	29.0 km in ESE Direction
Nearest State/ National Highway	SH - 19 NH - 58	12.4 km in SW Direction 0.8 km in NW direction
Interstate Boundary	NA	NA
Railway Station/Railway line	Nagaur Railway Station	14.5 km in NW Direction
Water Bodies	ChaparNaadi	3.25 km in ESE direction
	JakhaliNaadi	5.7 km in NNW direction
	Bamanda Nada	6.25 km in SE direction
	PinsariyaNaadi	7.5 km in SE direction

	Janjolai Naadi	7.75 km in North direction
	Bohra Naada	8.5 km in WNW direction
School	Within ML Area in South direction (100 m safety barrier will be left)	
Monument	NA	NA
Forest	NA	NA

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

Forest Land / Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Certificate/letter from the concerned Department will be obtained during EIA study.
National Park	No	Certificate/letter from the concerned Department will be obtained during EIA study.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule - I species (No.s and name of schedule - I species with authenticated letter)	-	This proposal is for ToR, Detailed Biological Study will be carried out after grant of ToR and if schedule - I species are present in the study area, Wildlife Conservation Plan will be duly approved by Chief Wildlife Warden.
Wildlife Conservation Plan	-	

ix. Green belt/Plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	104.37 ha.
Budget for green plant & plantation till the end of life of mine.	Rs. 4.7 Crore.
Budget for nursery	N/A
Details of existing plantation and its survival rate	It's a greenfield project.
No. of tree cuts in the mine lease area and compensatory afforestation	1500
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	5.18
On virgin land (towards habitation and others)	19.11
50 m safety zone of roads & electric lines	11.28
Backfilled area on non-grazing land	58.80
on top benches	10.00 ha

x. Rehabilitation & Resettlement:

R & R details	Total mining lease area is 434.0857 ha out of which 300.4457 ha is a Private land. Land will be purchased with negotiation and R&R provisions will be followed as per Central and State Government Rules & Notifications.
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xi. Court case details:

Court Case, No and its present status	No Court Case or Litigation is pending
Undertaking by Project Proponent w.r.t court case	The Project Proponent submitted a undertaking vide letter dated 16.11.2023 stating that there is no litigation pending against the project and/or any direction/ order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibilities will be borne by the company.

xii. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no: BP 843420 dated 16.11.2023 stating that the company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.
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xiii. Details of project cost and employment:

Particulars	Budget (Rs. in Crores)
Project Cost	Rs. 124.1 Crores
Employment	59 persons

3. Observation and Recommendation of the EAC:

The Project Proponent/EIA Consultant presented the KML file to indicate the surface features in the study area of 10 km radius. The Project Proponent showed the boundary of the mine lease area and further informed the EAC that Harima Village is located at mine lease boundary in Western direction. A road is passing through the mine lease area and will not be disturbed. Electric line is passing through the mine lease area and it will not be disturbed. Grazing land of 23.40 ha will also remain undisturbed. A primary school is located within the mine lease area on the southern side and the mining activity will reach near the school during the 36th year of mining operation. A crusher is proposed to be installed in the southern direction of the mine lease area. The EAC asked the Project Proponent to explore the possibility of shifting the school. The Project Proponent informed the EAC that school will be shifted with the consent of gram panchayat before the mining activity approaches nearby school. The Project Proponent also informed the EAC that there is no National Park, Wild Life Sanctuary, Biosphere Reserves, etc. within 10 km radius of the study area.

The EAC asked about the mineral transportation route. The Project Proponent informed the EAC that initially i.e., for 5 years the mineral will be transported by road to the cement plant located at a distance of 26km on southern side through National Highway (NH). The possibility of Over Land Belt Conveyor (OLBC) will be explored

after 5th year. The EAC opined that an underpass has to be constructed for crossing the village road. The Project Proponent also informed the EAC that during 1st five years no waste/OB will be envisaged. Water will be sourced from Matasukh lignite mine, proposed STP plant at nearby village, ground water and rain water collected in mine sump. An area of 300.03 ha will be excavated at the end of conceptual period, out of which 231.23 ha will be converted into water reservoir, 58.80 ha will be backfilled and 10.0 ha will be under bench plantation. Green belt/plantation will be covered over an area of 104.37 ha.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that a special emphasis has to be given to protect the grazing land. The EAC asked the Project Proponent to submit the plan for land acquisition in consent with the local people. The EAC suggested that the Project Proponent needs to test the hardness of the Limestone and accordingly shall explore the possibility to modify the cutting tools in consultation with the supplier of surface miner to eliminate drilling and blasting. Based on the discussions held, the EAC in its meeting held during 5-7 December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Ambuja Cements Limited for mining of Limestone in 3D2 Limestone Block (Auctioned Block) with proposed Limestone Production Capacity of 3.0 Million TPA, OB/waste 1.15 Million TPA, Top Soil 0.34 Million TPA, (Total Excavation 4.49 Million TPA) along with installation of Crusher (2000 TPH) with Wobbler in the mine lease area of 434.08502 ha, located at Villages: Harima & Sarasani, Tehsil and District: Nagaur, Rajasthan for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The EAC suggested that the Project Proponent needs to test the hardness of the Limestone and accordingly shall explore the possibility to modify the cutting tools in consultation with the supplier of surface miner to eliminate drilling and blasting.
- ii. The Project Proponent needs to submit the measures taken to protect the grazing land.
- iii. The Project Proponent needs to submit the plan for laying Over Land Belt Conveyor (OLBC) along with the timeline.
- iv. The Project Proponent needs to submit the action plan to construct the underpass for crossing the village road along with the timeline.
- v. The Project Proponent needs to submit the ecology restoration plan for mined out pits for using as Water reservoir/ Pisciculture as well as the plan for the backfilled area.

- vi. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
- vii. The Project Proponent shall monitor the water quality in the impact zone such as water reservoir, river water with specific reference to the parameter Langelier Saturation Index which will denote the impact of calcium carbonates on water bodies and these parameters and determine the tendency of water to form calcium carbonate scaling.
- viii. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and the dimensions of the road, existing and additional traffic load to the NH and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.
- ix. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- x. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration.
- xi. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xii. The Project Proponent needs to undertake the enumeration of the species within the mine lease area before cutting. The Project Proponent also needs to submit the compensatory afforestation plan for the no. of trees to be cut in the mine lease area.
- xiii. The Project Proponent needs to submit the action plan for undertaking the plantation along the 7.5m barrier, safety zone of nallah, village road, electric line etc., PP should also submit the details no of saplings to be planted, type of saplings proposed and the area to be covered under greenbelt/plantation along with the timeline and budget. The greenbelt/plantation plan shall be prepared in such a way that the ecology of the area shall be restored.

- xiv. The Project Proponent needs to submit employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xv. The Project Proponent shall 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.
- xvi. 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.
- xvii. 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.
- xviii. 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. The Project Proponent needs 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. An action plan for land acquisition in consent with the local people also needs to be submitted. Further, PP needs to submit the possession certificate and timeline for acquiring the land at the time of submission of EC proposal.
- xix. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

1.5 Kalay Mineral Block- Block IV (Auction Block) of M/s Fomento Resources Private Limited for mining of Iron Ore with proposed production capacity of 0.75 MTPA, Waste: 3.0 MTPA in the mine lease area of 152.5073 Ha, located at Village Santona, Sanguem Taluka, South Goa District, Goa - [F.No: IA-J-11015/11/2023-IA-II(NCM), Proposal No: IA/GA/MIN/422578/2023,EIA Consultant: M/s Mineral Engineering Services] -Terms of Reference (ToR)

The instant proposal is for mining of Iron Ore in Kalay Mineral Block - Block IV (Auction Block) of M/s Fomento Resources Private Limited with proposed production

capacity of 0.75 MTPA, Waste: 3.0 MTPA in the mine lease area of 152.5073 Ha, located at Village Santana, Sanguem Taluka, South Goa District, Goa.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and instant proposal attracts the general conditions as the mine lease area is located within 5km radius of BhagwanMahavir Wildlife Sanctuary and falls under Category "A" and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 15°17'01.6125" N to 15°18'08.7974" N and Longitude: 74°08'55.2583" E to 74°09'44.8333" E. The mine lease area falls under the Survey of India Toposheet No: D43C3 and falls in Seismic Zone-II.
- iii. Details of previous EAC meeting's: -
 - a) The proposal was earlier considered in the 15th EAC (Non-Coal Mining) meeting held during 30-31 May, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 22.06.2023 in Parivesh portal.
 - b) Accordingly, the proposal was considered in the 17th EAC (Non-Coal Mining) meeting held during 11-12 July, 2023. After detailed deliberations made by the Project Proponent and the Consultant, the EAC again deferred the proposal and was of the view that the proposal may be considered only after obtaining the comments from the ESZ Division. The ESZ Division gave their comments on 27.07.2023 in the instant matter.
 - c) The proposal was again reconsidered in the 19th EAC (Non-Coal Mining) meeting held during 24-25 August, 2023. After detailed deliberations, the EAC was of view that Ministry's Regional Office (IRO), Bangalore and a Senior Officer from Forest Department, Government of Goa and a Senior Officer from Directorate of Mines and Geology, Government of Goa may be requested for a joint visit to the site for ground truthing and submit the report to the Ministry. Based on the discussions held, the EAC deferred the proposal. The Regional Office, Bangalore MoEF&CC vide email dated 25.10.2023 submitted the site inspection report and also the Project Proponent on 02.11.2023 requested to consider the instant proposal. Accordingly, the proposal was again considered in the 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023.

Based on observation of EAC in its EAC meeting held during 24-25 August, 2023 and compliance of observation of EAC are detailed below:

S. No	Observation of EAC in its meeting held during 24-25 August, 2023	Compliance of observation of EAC
1	The EAC was of view that Ministry's Regional Office	The Ministry vide email dated 25.09.2023 requested the Regional Office, Bangalore

	<p>(IRO), Bangalore and a Senior Officer from Forest Department, Government of Goa and a Senior Officer from Directorate of Mines and Geology, Government of Goa may be requested for a joint visit to the site for ground truthing and submit the report to the Ministry.</p>	<p>to visit the mine site and furnish the report within 15 days for further necessary action. Accordingly, site inspection was carried out by Regional Office on 05.10.2023 along with the representative from State Forest Department (North Goa & South Goa) and Department of Mining and Geology, Govt. of Goa and representatives from M/s Fomento Resources Private Limited.</p> <p>The committee perused the documents submitted by the Project Proponent. The committee also inspected the boundary pillars (BP1, BP 9 to BP 18) that are located along the eastern boundary and towards the ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park. The Regional Office vide email dated 10.10.2023 requested the State Forest Department, Govt. of Goa to provide the coordinates of ESZ boundary and accordingly State Forest Dept. vide email dated 16.10.2023 provided the coordinates of boundary of ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park. The coordinates collected during the site inspection along with the coordinates of ESZ of Bhagwan Mahaveer Wildlife Sanctuary are plotted in Google earth map. As per the map, the project area falls outside of ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park.</p> <p>Based on the observations made during site inspection, clarifications provided by State Forest Department and Environment Department, the committee states that the project site i.e. Block IV-Kalay Mineral Block area (Auction Block) of M/s Fomento Resources Private Limited located at village Santona, Sanguem Taluka, South Goa District Goa falls outside of ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park and ESA of Western Ghats.</p>
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iv. Details of Mine Lease:

S. n o	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine lease area in Ha
1	Letter of Intent for grant of mining lease vide LrNo. DMG/25/Auction cell/LOI-function/ 2023/ 2804 in pursuant to Rule 10(2) of the Auction Rules	13/01/2023	Iron Ore (Major)	LOI valid for 3 years	Directorate of Mines and Geology	179.1826 Ha
2	Letter No.03/18/2023/Major/Mines/3286 dated 13/03/2023 for revising the area by excluding the Eco-sensitive zone (ESZ) area of 26.6753Ha.	13/03/2023	Iron Ore (Major)	LOI valid for 3 years	Directorate of Mines and Geology	152.5073 Ha

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

Private land	72.9675 Ha
Government land	79.5398 Ha
Forest land	Nil
Total Mining lease area (MLA), ha	152.5073 Ha
Private land for crusher, workshop & other infrastructure outside the MLA	Nil

vi. Details of Mining Plan:

- a) The Project Proponent submitted that the Mining Plan including Progressive Mine Closure Plan was approved by Indian Bureau of Mines on 30/06/2023.
- b) The method of mining will be opencast mechanized using Heavy Earth Mining Machinery without drilling and blasting. Geological Reserves is estimated as 16.731 Million Tonnes and Mineable Reserves estimated as 8.188 Million Tonnes. Life of the mine will be 24 years.
- c) The proposed bench height and width will be 6m and 8m respectively. The individual bench slope will be 63° and overall pit slope will be 30°.
- d) The ore will be transported from Mine to jetty through road to a distance of 14 km by engaging Tipper Trucks/ Dumper.
- e) There will be no generation of Topsoil and Mineral Rejects. Waste (OB) generated will be disposed at the earmarked site as per Mining plan.

vii. Water requirement:

Total water requirement	300LKD	Fresh water	246KLD
		Treated water	54KLD
Source	1. Mine Pit Water – used for Dust suppression, Workshop, Wheel wash System and Green belt/plantation. 2. Well water – used for Domestic purpose.		
Permission for withdrawal/ intersection along with details of grant and its validity	Application has been submitted to Water Resources Department, Goa, and same is under process.		

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

Particulars	Particular's Name	Distance & Direction
Village	Santona Village	The Mineral Block is located within Santona village.
Town	Sanvordem Town	6 km by road in the South-West Direction.
Highway	State Highway SH-7	1.27 km by road in the West Direction.
Interstate Boundary	Karnataka	10.03 km (aerial distance).
Railway Station/Railway line	Kalay Railway station	4.0 km by road in the East Direction.
Water Bodies	Kalay River	5m from the Eastern boundary of the Mineral Block.

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

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	--
National Park	No	The Project Proponent submitted the letter from the Office of the Directorate of Mines & Geology vide Lr.No. 03/18/2023/Major/Mines/ 1235 dated 07.07.2023 stating that proposed Block-IV Kalay Mineral Block located at Santona Village Sanguem Taluka, South Goa District, Goa falls outside notified ESZ boundary of Bhagwan Mahavir Wildlife The Project Proponent submitted the map showing the location of the map demarcating the location of the mine lease area w.r.t ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park. The distance between the
Wildlife Sanctuary	Yes	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	Yes	

		mine lease area and ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park is 1.04 km.
Coastal Regulation Zone (CRZ)	No	--
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	-	Details regarding Schedule-I species will be provided in the EIA report after carrying out baseline study.
Wildlife Conservation Plan	-	Based on the observation of Schedule-I species in the study area during the baseline study.
Comments of the ESZ Division dated 21.06.2023	<p>The comments of the ESZ Division are as follows:-</p> <p>The coordinates of mine lease area were checked w.r.t kml file of Bhagwan Mahaveer ESZ notified area available with ESZ Division as well as with boundary of the Western Ghats Eco-Sensitive Area. It was found that one of the coordinate (15°18' 08.7974" N and 74° 09' 44.8333" E) of mine lease area falls within the ESZ boundary of Bhagwan Mahaveer Wildlife Sanctuary as well Western Ghats Ecosensitive area. The above location is examined vis-a-vis the (i) ESZ boundary of Bhagwan Mahaveer Wildlife Sanctuary and National Park, Goa as made available to this Division by the State Govt of Goa and, (ii) The boundary of the Western Ghats Eco-Sensitive Area (WGESA), as per the 5th draft notification of the WGESA, dated 06.07.2022, as made available to this Division by the High Level Working Group on WGESA (Kasturirangan Committee). One of the point locations (15° 18 '08.7974" N, 74° 09' 44.8333" E) is lying inside both the ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park, Goa and the WGESA boundary as per the 5th draft notification of the WGESA, dated 06.07.2022. Additionally, the distance as estimated between the point location (15° 18 '08.7974" N, 74° 09' 44.8333" E), and the Bhagwan Mahaveer NP & WLS, Goa is approx. 0.7526 km (less than 1 km).</p>	
Comments of the ESZ Division dated 27.07.2023	<p>The ESZ Division gave their following comments on 27.07.2023 as given below: -</p> <ol style="list-style-type: none"> i. The ESZ Division has informed that the Kalay mineral block falls partly within the ESZ boundary of Bhagwan Mahaveer Wildlife Sanctuary. And w.r.t. draft WGESA boundary, the ESZ Division has informed that the kml of kalay mineral block is outside the kml of draft WGESA boundary. 	

	<p>ii. The ESZ Division has also informed that the Hon'ble Supreme Court by way of a clarification vide an Order dated 28.04.2023 in IA No. 3949 of 2016 in W.P (C) No. 202 of 1995: T.N Godavarman Thirumulpad Vs UoI&Ors. clarified that in specific terms that mining within 1.0 km from the boundary of the protected area shall be strictly prohibited. It also specified that even if the ESZ is less than 1.0 km, mining within 1.0 km from the boundary of the Protected Area, even beyond ESZ boundary shall be strictly prohibited.</p>
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x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	<p>Proposed areas to be brought under plantation is as given below:</p> <ol style="list-style-type: none"> 1. Greenbelt - 3.0288 Ha 2. Plantation - 71.4867 Ha (other than greenbelt at conceptual stage) <p>Plantation of around 2500 saplings per hectare is proposed.</p>
Budget for green plant & plantation till the end of life of mine.	Rs 1.86 Crores
Budget for nursery	Saplings from Forest Department, Government of Goa will be procured.
Details of existing plantation and its survival rate	<p>Details of existing plantation within the Mineral Block is given below:</p> <ol style="list-style-type: none"> 1. Stabilized Dumps – 5.6 Ha 2. Mined out area reclaimed & rehabilitated – 3.12 Ha <p>The plantation was carried out by the erstwhile Mine Lessee.</p>
No. of tree cuts in the mine lease area and compensatory afforestation	Mining operation will be carried out in the area, which was already broken up. Hence, there is no proposal of cutting of trees. Compensatory Afforestation is not applicable.
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	1. Greenbelt – 3.0288 Ha (within 7.5m barrier)
50 m safety zone of nallah, roads, electric lines	2. Plantation – 71.4867 Ha (other than greenbelt at Conceptual stage)

xi. Rehabilitation & Resettlement:

R & R details	Not Applicable, as no resettlement is proposed during life of
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	mine.
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xii. Details of Court Cases:

Court Case, No. and its present status	<ol style="list-style-type: none"> 1. Writ Petition 592 of 2022 in Hon'ble High Court of Bombay at Goa <ul style="list-style-type: none"> • The said petition seeks to challenge the constitutionality of the tender documents of Phase I auction of Goa mines. • The petition alleges that there is a non-disclosure of essential facts such as bore hole data, approved mining plan, production data of the previous five years and exploration data and has therefore prayed for quashing of auction notice to the extent it fails to include the essential facts which is against the principle that level playing field should be provided to the petitioner for its participation in the auction. 2. As per the last order, Fomento Resources Private Limited is added as a party to the petition as it has acquired Block IV- Kalay Mineral Block in e-auction tendered vide NIT dated 30/09/2022. 3. No stay on conducting the e-auction of Mineral Block granted and the Case is pending for disposal.
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xiii. Details of project cost and employment:

Particulars	(Rs. In Crore)
Project Cost	Rs.3680 Lakhs
Employment (No.s)	Direct & indirect employment of 327 persons. Approximately 1500 peoples will benefit directly & in-directly by this project.

3. Observation and Recommendation of the EAC:

The EAC deliberated on the site inspection carried out by Regional Office on 05.10.2023 along with the representative from State Forest Department (North Goa & South Goa) and Department of Mining and Geology, Govt. of Goa and representatives from M/s Fomento Resources Private Limited. The EAC noted that the Regional Office vide letter dated 25.10.2023 concluded that the project site i.e. Block IV- Kalay Mineral Block area (Auction Block) of M/s Fomento Resources Private Limited located at village Santona, Sanguem Taluka, South Goa District Goa falls outside of ESZ of Bhagwan Mahaveer Wildlife Sanctuary and National Park and ESA of Western Ghats. The Project Proponent also briefed about the chronology of mine lease till the joint inspection report carried out by Regional Office on 05.10.2023.

After detailed deliberations made by the Project Proponent, the EAC in its meeting held during 5-7 December, 2023, under the provisions of EIA Notification, 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Terms of Reference (ToR) to M/s Fomento Resources Private Limited for mining of Iron Ore in Kalay Mineral Block - Block IV (Auction Block) with proposed

production capacity of 0.75 MTPA, Waste: 3.0 MTPA in the mine lease area of 152.5073 Ha, located at Village Santona, Sanguem Taluka, South Goa District, Goa for undertaking detailed EIA/EMP study subject to the following specific conditions in addition to the standard ToR conditions and applicable for non-coal mining projects:-

- i. The instant ToR is subject to the outcome of the said court case i.e., WP 592 of 2022 before the High Court of Bombay at Goa.
- ii. The Project Proponent needs to explore the possibility of evacuating the material through rail.
- iii. The Project Proponent needs to submit the map demarcating the exact distance of the railway line and railway boundary from the mine lease area. The Project Proponent also needs to submit the details of train passing and their frequency. Further, the Project Proponent needs to submit the measures taken to protect the railway line from the mining activity.
- iv. The Project Proponent needs to submit the action plan for shifting the habitations inside the mine lease area.
- v. The Project Proponent needs to submit the detailed report on the engineering design for garland drain, settling tank and check dams and its efficacy through recognized institution. The study should also include the per day silt load, settling velocity of the silt, retention time required based on the annual rainfall with a provision to monitor the turbidity of the overflow from the siltation tank as well as monitoring of the turbidity into the drains.
- vi. The Project Proponent needs to explore the likelihood of river water entering into the mine pit below the RL of the HFL and the measures that are required to be taken for prevention of seepage and in the event of seepage to drain out the water through settling tank. PP also needs to submit the measures to be taken for protection of river in the vicinity of the mine lease area due to mining activity.
- vii. The Project Proponent needs to submit the ecology restoration plan.
- viii. The Project Proponent needs to submit the year wise sequence of mining operation and plan for backfilling.
- ix. The Project Proponent needs to submit the map showing the transport route of the mineral from the mine lease area to the destination, impact of details of habitation at a distance of 100m from the center on both sides of road, details of no. of trips/day to and fro, capacity of the dumper/tipper to be deployed and

the dimensions of the road and the carrying capacity of the road. Project Proponent needs to submit SOP for transportation.

- x. The Project Proponent needs to monitor the ambient air quality and noise level at the mine lease boundary, nearest village, crusher, predominant downwind direction and at other sensitive receptors. Accordingly, Project Proponent shall propose to install Continuous Ambient Air Quality Monitoring Station within certain timeline.
- xi. The Project Proponent should prepare the EMP considering the scenario of pollution to be generated for normative and peak total excavation for assessing air pollution, noise level and ground vibration due to HEMM.
- xii. The Project Proponent needs to carry out the Public Hearing as per provisions of EIA Notification, 2006. PP should also submit the time bound action plan on concerns of the public through a separate budget with capital expenditure with a timeline of 3 years. The Project proponent shall ensure that the activities proposed under the public hearing shall be different from the CSR activities.
- xiii. The Project Proponent needs to submit the greenbelt/afforestation development plan for undertaking plantation in the periphery of the mine lease boundary, safety zone etc., The details of the no. of saplings proposed, type of species, spacing and the area to be covered including the cost and timeline for completion of plantation needs to be provided in the EIA report.
- xiv. The Project Proponent 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.
- xv. 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.
- xvi. 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.

- xvii. The Project Proponent needs to submit the employment based skill development plan for the local people and thrust should be to provide employment to local people after imparting training.
- xviii. The Project Proponent shall conduct drone survey of the mine lease area and buffer area and submit during the appraisal for EC.

Day 2: 6th December, 2023 (Wednesday)

2.1 Jajang Iron Ore mine of M/s JSW Steel Ltd for production of 12.80 MTPA (ROM) of Iron ore, OB/IB/SB- 14.67 MTPA (Total excavation of 27.47 MTPA) along with screening, crushing, and 10 MTPA Beneficiation Plant in the mine lease area of 669.078 Ha (as per DGPS Survey)/666.150 Ha (as per ROR) and in villages Jajang, Jadibahal, Palsa (Ka), Bandhuabada, Tehsil Barbil, District Keonjhar, Odisha – [F.No: IA-J-11015/57/2020-IA-II(NCM), Proposal No: IA/OR/MIN/450808/2023] –Terms of Reference

The instant proposal is for mining of Iron Ore in Jajang Iron Ore mine of M/s JSW Steel Ltd for production of 12.80 MTPA (ROM) of Iron ore, OB/IB/SB- 14.67 MTPA (Total excavation of 27.47 MTPA) along with screening, crushing, and 10 MTPA Beneficiation Plant in the mine lease area of 669.078 Ha (as per DGPS Survey)/666.150 Ha (as per ROR) and in villages Jajang, Jadibahal, Palsa (Ka), Bandhuabada, Tehsil Barbil, District Keonjhar, Odisha.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals & 2(b) Mineral beneficiation and falls under Category “A” as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude 21°54’43.72” N to 21°56’33.49”N and Longitude: 85°24’49.66”E to 85°26’14.56” E. The mine lease area falls under the Survey of India Toposheet No: F45N5 (73G/5) and falls in Seismic Zone - II.
- iii. Details of previous Environmental Clearance (EC):

Date of application	Proposal No/ FileNo	Consideration by EAC	Details of EC	Date of accord
20.03.2012	J-11015/96/2012-IA-I(M),	March 20-21, 2014	Production of Iron ore from 5.5 MTPA to 16.5 MTPA (total handling including dry processing) and installation of 6.0 MTPA wet beneficiation plant within mine lease area of 666.15 ha [67.595 ha (forest area for which	13.03.2015

			FC is available) + 379.86 ha of DLC forest for which FC is available + 180.565 ha (non-forest area)] excluding 37.74 ha of forest land acquired by railways in favour of M/s Rungta Mines Ltd.	
11.06.2015	J-11015/96/2012-IA-I(M),	July 29-30, 2015	Production of iron ore from 5.5 MTPA to 16.5 MTPA (12.8 million TPA ROM by fresh excavation + dry screening & crushing of 3.7 million TPA of low grade iron ore/reworking of old dump) only in favour of M/s Rungta Mines Ltd.	09.11.2015

iv. Details of Mine Lease Area:

- a) The Project Proponent submitted that the Letter of Intent for grant of mining lease was granted by the Dept. of Steel & Mines, Govt. of Odisha vide Lr.No: 3007/IV(Misc.)SM-66/2016(Pt-II)/S&M, Bhubaneswar dated 18.03.2020 for Jajang Block for Iron Ore over an area of 669.078 ha for a period of 50 years in favour of M/s JSW Steel Limited.
- b) Then, the Dept. of Steel & Mines, Govt. of Odisha granted the Vesting Order vide No. 4190/III(A)SM-02/2020/SM dated 29.05.2020 for a period of two years from the date of execution of lease deed or till the date of getting fresh approvals, clearances, licenses, permits, and the like, whichever is earlier.
- c) The Project Proponent also submitted that the mine lease deed was executed vide IN-OD01080961199396S dated 27.06.2020 for the period up to 26.06.2070.

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

Private land	82.426 ha
Governmentland	38.577 ha
Forest land	543.916 ha
Total Mining lease area (MLA), ha	669.078 ha
Private land for crusher, workshop & other infrastructure outside the MLA	NA

vi. Details of Mining Plan:

- a) The Project Proponent submitted that the Modification of Mining Plan along with Progressive Mine Closure Plan vide Lr. No: MPM/A/11-ORI/BHU/2021-22 dated 18.11.2021 was approved by Indian Bureau of Mines (IBM) for Iron Ore over an area of 669.078ha (As per DGPS)/ 666.150 ha (As per RoR) for the period 2021-22 to 2024-25.

- b) Method of mining will be Opencast Mechanized mining. Total geological reserve estimated as 50.115 Mt and Mineable reserves as 37.492 (Mt).
- c) The mine bench height will be 9m and bench width will be 10-12 m.
- d) There are two no.s of railway siding namely, RMJC-JSW Railway Siding and part of BIL Siding existing within the ML area. These sidings will be used for transportation of ore of Jajang block and ore of other mining leases viz., Nuagaon, Narayanposhi, Gonia & upcoming mines of M/s JSW Steel Ltd.

vii. Water requirement:

Total water requirement	8000 m ³ /hr	Fresh water	885 m ³ /hr
		Treated water	7115 m ³ /hr
Source	Baitarani River		
Permission for withdrawal/intersection along with details of grant and its validity	Permission shall be obtained from Department of Water Resources, Govt of Odisha for abstraction of water from Baitarani River.		
Additional information (if any)	Rain harvested water in mine pit shall be utilized to the maximum extent possible in order to obviate dependence on river water.		

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

Particulars	Particular's Name	Distance & Directions
Village	Jajang Bandhuabeda Palsa(Ka) Joribahal	1.0km 7.8km 9.7km 10km
Town	Joda Tata Nagar	7kms 170kms
Highway	The Joda – Bamebari - Keonjhar road connect with NH-215 at Kalapahar SH-10B	11.6km,N 14.2km,NNW
Interstate Boundary	Odisha –Jharkhand	20.4km,NW
Railway Station/ Railway line	Jaroli RS Banspani RS RMJC-JSW Railway Siding and part of BIL Railway Siding exist within the lease area.	1.6km,NNW 7km on South-Eastern Railway Within Lease
Water Bodies	Baitarani River Tapaikiri Nala Kundra Nadi	20m,NE 2.4km,NE 5.4km,WNW

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

Forest Land/ Protected Area/Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	i. Stage-II FC was obtained vide F.No.8-88/98-FC, Dated 28/08/2014 for an area of 447.811ha (incl 44.70 ha Rev.F) and the same was transferred to JSW. ii. Fresh diversion proposal under FC Act, 1980 has been applied for 67.041 Ha (ROR)/ 69.988 ha (DGPS) of forest land vide Proposal No. FP/OR/MIN/147908/2021 dated 05.10.2021 and the same is under Process.
National Park	No	-
Wildlife Sanctuary	No	-
Elephant/Tiger Reserve	No	-
Eco-Sensitive Zone (ESZ) / Eco-Sensitive Area (ESA)	No	-
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with Authenticated letter)	No	-
Wildlife Conservation Plan	Yes	Lr. No: 1842/CWLW-FDWC-FD-0116-2021 dated 25 th Feb 2022.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	34.653 Ha
Budget for green plant & plantation till the end of life of mine.	Rs 3.0 Cr
Budget for nursery	Rs 50 lakhs
Details of existing plantation and its survival rate	28,475 no.s with survival rate of 80%
No. of tree cuts in the mine lease area and Compensatory afforestation	NA
Particulars for Green belt/plantation	Area covered (in Ha)
7.5m barrier & non-mineralized zone	8.7 ha
50m safety zone of nallah, roads, electric lines	5.0 ha
500m safety zones of nearest habitation villages	1.80 ha

xi. Rehabilitation & Resettlement (R&R):

R&R details	The Project Proponent has submitted that for beneficiation plant construction and operation, no impact or disturbance or relocation of human habitats is envisaged. Hence, there will be no Rehabilitation & Resettlement issues.
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xii. Court case details:

Court Case, No and its present status	The Project Proponent has submitted that one case is pending for proposed Jajang mine at Odisha High court with order no.WP(C) 24918/2020 regarding the refund of excess stamp duty paid during the time of registration of lease deed, till now no order has been passed.
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xiii. Details of project cost and employment:

Particulars	(Rs.InCrore)
Project Cost	1000 Cr
Employment (No.s)	250

3. Observation and Recommendation of the EAC:

The Project Proponent/EIA Consultant presented the KML file to indicate the surface features in the study area of 10km radius. The Project Proponent showed the boundary of the mine lease area and informed the EAC that the beneficiation plant is proposed to be put up in the already excavated area within the mine lease area. About 30% of tailings will be generated and the same will be backfilled in the adjacent area to the beneficiation plant. Crusher will be installed near the beneficiation plant. Railway siding is located within the mine lease area. A colony is located on the northern side of the mine lease area. Habitations are located in the north eastern side of the mine lease area. A school is located at a distance of 900m from the workings. The EAC asked the Project Proponent to show the Baitarani River and the distance of the Baitarani River from the mine lease area. The Project Proponent showed the intake point and layout of the pipeline coming into mine lease area. About 2.8 km of distance of pipeline is outside the mine lease area. The EAC asked the Project Proponent whether permission was obtained from withdrawal of water from Baitarani River. The Project Proponent informed the EAC that permission will be obtained withdrawal of water from Baitarani River. The EAC asked the Project Proponent to submit the information about land where the pipeline situated outside the mine lease area and statutory permission in this regard. The EAC also asked the Project Proponent to give the quantity of water available in the mined out pit. The EAC noted that the Project Proponent was not able to justify the water balance. The EAC was the view that since mineral beneficiation requires huge quantity of water requirement, the Project Proponent needs to properly justify the water requirement and water consumption and their source with detailed water balance.

The EAC noted that the Project Proponent mentioned that detailed study about Schedule-I species within the study area will be undertaken and also noted that the Project Proponent mentioned that Site Specific Wildlife Conservation Plan was approved on 25th Feb 2022. The EAC observed that Project Proponent gave two contradictory statements w.r.t Site Specific Wildlife Conservation Plan. The EAC was of the view that the Site Specific Wildlife Conservation Plan approved on 25th Feb 2022 is not particular for this instant proposal. The EAC asked the Project Proponent to clarify the same. The EIA Consultant informed the EAC that they were appointed

by the Project Proponent three days ago only and they have not gone through the project details completely. The EAC warned the Project proponent and consultant for coming before the EAC without complete information of the project details. For presentation before EAC from PP side, some senior responsible person to attend the meeting in future. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to justify the water requirement and water consumption and their source with detailed water balance. The Project Proponent also needs to submit the proof of submission of application for withdrawal of water from Baitarani River.
- ii. The Project Proponent needs to submit the details of strength of the school & habitations located within the mine lease area, sequence of mining near the school & habitations and their distance from Ultimate Pit Limit.
- iii. The Project Proponent needs to give clarification about the Wildlife Conservation Plan and accordingly needs to submit the copy of the Wildlife Conservation Plan.
- iv. The Project Proponent needs to submit layout of beneficiation plant and crusher plant with all mitigative measures proposed to be taken with respect to dust and noise. The project proponent also needs to indicate material balance in the layout.
- v. The Project Proponent needs to come out with alternative disposal of tailings if any.
- vi. The Project Proponent needs to submit the status of mine closure plan submitted to Indian Bureau of Mines, Nagpur.

2.2 South Kaliapani mine of M/s Odisha Mining Corporation Ltd for mining of Chromite Ore without change in production capacity of 1.40 MTPA of Chromite Ore [Total Excavation: 16.64 MTPA (Production: 1.40 MTPA (ROM) + Waste Rock: 15.24 MTPA)] along with an annual throughput capacity of 4,74,000 tonnes (0.47 million tonnes) of COB plant in the mine lease area of 552.457 ha [Forest land: 425.398 ha + Non-Forest land: 127.059 ha] out of 720.727 ha (DGPS)/ 721.405 ha (RoR), located at Villages Kaliapani, Gurujangpal, Sukurangi and Saruabi, Tehsil Sukinda, District Jajpur, Odisha - [F.No: J-11015/407/2008-IA.II(M), Proposal No: IA/OR/MIN/434336/2023;EIA Consultant: M/s MECON Limited]- Environmental Clearance

The instant proposal is for mining of Chromite Ore in South Kaliapani mine of M/s Odisha Mining Corporation Ltd without change in production capacity of 1.40 MTPA of Chromite Ore [Total Excavation: 16.64 MTPA (Production: 1.40 MTPA

(ROM) + Waste Rock: 15.24 MTPA)] along with an annual throughput capacity of 4,74,000 tonnes (0.47 million tonnes) of COB plant in the mine lease area of 552.457 ha [Forest land: 425.398 ha + Non-Forest land: 127.059 ha] out of 720.727 ha (DGPS)/721.405 ha (RoR), located at Villages Kaliapani, Gurujangpal, Sukurangi and Saruabi, Tehsil Sukinda, District Jajpur, Odisha.

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

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals & 2(b) Mineral beneficiation and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude 21°00'49.64076"N to 21°03'25.10625"N and Longitude: 85°46'25.96764"E to 85°48'28.53433"E. The mine lease area falls under the Survey of India Toposheet No: F45N16 and falls in Seismic Zone - II.
- iii. The instant proposal was earlier considered in the 17thEAC (Non-Coal Mining) meeting held during 11-12 July, 2023 wherein the EAC deferred the proposal for want of requisite information. Then, the Project Proponent submitted the information on 14.09.2023 and 17.11.2023 in Parivesh portal. Accordingly, the proposal was again considered in the 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023.

Based on observation of EAC in its EAC meeting held during 11-12 July, 2023 and compliance of observation of EAC are detailed below:

S. No	Observation of EAC in its meeting held during 11-12 July, 2023	Reply by the Project Proponent
1	The Project Proponent needs to carry out the fresh scientific study for stabilization of OB dump through reputed institute.	The Project Proponent has submitted the Comprehensive Geo-Technical Study on Dump Slope Stability over 168.948 Ha of South Kaliapani Chromite carried out by Indian Institute of Technology (IIT), Kharagpur during November, 2023. This report includes different laboratory tests for determining material properties of dump samples sent by mine management. The cross-section along AA' and BB' is taken into consideration for dump stability analysis. For section AA', the factor of safety (FOS) is found to be 2.78 in dry condition and 1.56 in wet condition. The dump along section along BB' is also analysed and FOS is 2.67 in dry condition and 1.76 in wet condition. The overall slope angle of dump is 22 deg for section AA' and BB'. The study

		shows that proposed external dump over 168.948 Ha of South Kaliapani Chromite Mine is stable.								
2	The Project Proponent needs to submit the action plan for phase wise dump management over an area of 168.948 ha.	<p>The Project Proponent has submitted that the phase wise dumping over an area of 168.948 ha will be started after obtaining EC. The Project Proponent also submitted the details of year wise dumping up to conceptual period as mentioned below in table:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Proposed OB dump to be dumped (million cu.m)</th> </tr> </thead> <tbody> <tr> <td>1st year</td> <td>1.86</td> </tr> <tr> <td>2nd year</td> <td>2.69</td> </tr> <tr> <td>3rd year to conceptual</td> <td>21.45</td> </tr> </tbody> </table> <p>The Project Proponent also submitted that the OB dumping will be done as per the recommendation of the scientific study. All the necessary steps will be taken for stability of dump.</p>	Year	Proposed OB dump to be dumped (million cu.m)	1 st year	1.86	2 nd year	2.69	3 rd year to conceptual	21.45
Year	Proposed OB dump to be dumped (million cu.m)									
1 st year	1.86									
2 nd year	2.69									
3 rd year to conceptual	21.45									
3	The Project Proponent needs to carry out the study on the occupational health exposure on mine workers/local people, land, water bodies and biological environment due to mining activity with respect to hexavalent chromium and total chromium. The Project Proponent needs to submit the records of the occupational health check-up carried out during the FY 2022-23 with supporting documents.	<p>The Project Proponent has submitted the study on occupational health exposure on environmental components due to mining activity with respect to hexavalent chromium and total chromium. To comply with the above conditions, the periodical data being generated by Center for Envotech & Management Pvt. Ltd., A NABL accredited Laboratory and the data generated by M/s. MECON, Ranchi during baseline data generation has been compiled for various environmental components for analysing the concentration of hexavalent chromium and total chromium in ambient air, water (surface and ground), soil and plant leaves.</p> <p>The Project Proponent also submitted that the surface water samples were collected from the upstream and downstream of Damsal Nala and Karchamula Nala flowing near the mine areas of South Kaliapani to understand the impact of mine discharges, if any, into the water bodies. In order to assess</p>								

		<p>the impact of Hexavalent Chromium (Cr6+) in the ground water, samples from 09 (nine) locations have taken into consideration. To assess wastewater quality, weekly samples for three months (March-May 2022) from ETP inlet and outlet have been collected and analyzed for Hexavalent Chromium (Cr+6) and Total Chromium (Cr). The mineralogical composition of PM10 in terms of heavy metals were carried out in selected samples for the ambient air monitoring location for Iron, Manganese, Zinc, Chromium, Cadmium and Copper. In order to gather detailed information about prevailing health conditions of the workers of different age groups, period of exposure, dietary intake, sign and symptoms of diseases a detailed survey was conducted by floating questionnaires to the selected subjects.</p> <p>Further, the Project Proponent has submitted that the surface water quality analysed from the samples collected from the nearby water body (DamsalaNalla) and the u/s and d/s of the ETPs (in summer season of 2022), concentration of Hexavalent Chromium ranges from 0.016 to 0.038 mg/l. Similarly, the analysis results of Hexavalent Chromium in Surface Water samples collected in the months of Jan to June, 2023 are well below 0.05 mg/l. The concentration of Cr6+ analysed during the Summer Season, 2022 ranges from 0.006 mg/l to 0.026 mg/l. Similarly, analysis results of Hexavalent Chromium in Ground Water samples collected from within and nearby areas of the mine in the months of Jan to June, 2023 are seen below 0.035 mg/l. the concentration of Hexavalent Chromium (Cr⁺⁶) in the treated effluent ranges from 0.01 mg/l to 0.026 mg/l. Further, the analysis results of Hexavalent Chromium in treated effluent water from ETP in the measures in the months of Jan to June,</p>
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		<p>2023 indicate that the concentration of Hexavalent Chromium Cr⁺⁶ well below 0.03 mg/l.</p> <p>Hexavalent chromium is not included in the list of parameters specified in IS: 10500 (2012) standards for drinking water quality. The concentration of hexavalent chromium in ground water, surface water and treated water discharge (from ETP outlet) samples are very less compared to general effluent standard of Hexavalent Chromium, which is 0.1 mg/l. The summarized results of Chromium concentration found in PM10 ranged from 0.009 to 0.035 µg/m³. The hexavalent chromium has not been detected in any of the sampling locations. The soil needs to be supplemented with organic manure such that the hexavalent chromium is reduced to nontoxic Chromium (III). In each of the age group of workers ranging from 20 - 25 years to 50-55 years, irrespective of their type of work, there are no serious health conditions detected. Similarly, within each age group; irrespective of period of exposure ranging from 9 months to 40 months (1 to 4 years), no such serious health issues were identified.</p> <p>The Project Proponent also submitted the copies of the records of the occupational health check-up carried out during the FY 2022-23 in the form of IME/PME of the mine workers.</p>																								
4	<p>The Project Proponent needs to submit the action plan for phase wise tree felling.</p>	<p>The Project Proponent has submitted the stage wise action plan for cutting the trees from OB dump area as given below in table below:</p> <table border="1" data-bbox="799 1733 1367 2024"> <thead> <tr> <th>S. No</th> <th>Particulars</th> <th>Area (Ha)</th> <th>Trees to be felled (in no.s)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2023-24 (including road)</td> <td>56.012</td> <td>2801</td> </tr> <tr> <td>2</td> <td>2024-25</td> <td>4.953</td> <td>248</td> </tr> <tr> <td>3</td> <td>2025-26</td> <td>13.351</td> <td>668</td> </tr> <tr> <td>4</td> <td>2026 onwards</td> <td>76.059</td> <td>3803</td> </tr> <tr> <td>5</td> <td>Safety Zone</td> <td>7.952</td> <td>No tree</td> </tr> </tbody> </table>	S. No	Particulars	Area (Ha)	Trees to be felled (in no.s)	1	2023-24 (including road)	56.012	2801	2	2024-25	4.953	248	3	2025-26	13.351	668	4	2026 onwards	76.059	3803	5	Safety Zone	7.952	No tree
S. No	Particulars	Area (Ha)	Trees to be felled (in no.s)																							
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3	2025-26	13.351	668																							
4	2026 onwards	76.059	3803																							
5	Safety Zone	7.952	No tree																							

			shall be felled
	6	Undisturbed (Valley)	No tree shall be felled
		Total	7520
5	The Project Proponent needs to highlight on the Specific Terms of Reference point no. iii. i.e. "The Project Proponent shall revise the Mining Plan to dispose the overburden of this instant mine in the allocated area of overburden (an area of 168.948 ha) instead of dumping of Sukrangi Overburden and shall submit the same at the time of appraisal of Environmental Clearance (EC)".	The Project Proponent has submitted that the mining plan approved by the Indian Bureau of Mines vide Lr. No: BBS/JJP/CR/2015/MPM/2022-23 dated 12.05.2022 does not include dumping of Overburden from Sukrangi mines in the allocated area of 168.948 ha.	
6	The Project Proponent needs to obtain the letter from the State Govt. for the single mine lease for the actual mine lease area.	The Project Proponent has submitted the letter from the Dept. of Steel and Mines, Govt. of Odisha vide letter dated 12.09.2023 stating that the State Govt. vide order dated 14.12.2021 has granted the mining lease over an area of 168.948 ha of non-mineralized area in favour of M/s OMC Ltd with the stipulation that the said area will be included in the existing ML area of South Kaliapani Chromite mining lease over 552.457 ha with validity up to 21.01.2030 and will form a part of South Kaliapani Chromite mining lease and the lessee shall execute the supplementary mining lease deed in respect of South Kaliapani Chromite mining after obtaining the necessary statutory clearances. It has been also informed that the Supplementary Lease Deed of South Kaliapani mining lease will have to be executed pursuant to order dated 14.12.2021 of State Govt. where in it will be a single lease over the total area of 720.727 ha (DGPS)/ 721.405 ha (RoR) with inclusion of the mentioned non-mineralized area.	
7	The Project Proponent needs to submit the copies of the advertisements and postpone notice for the earlier public hearing.	The Project Proponent has submitted the copies of initial public hearing notice dated 13.02.2023 and reschedule of public hearing notice dated 04.04.2023.	
8	The Project Proponent needs to submit the current status of the	The Project Proponent has submitted that the court case has been disposed	

	court case pending in the JMFC Court, Barbil, Odisha vide case. No 2(C)C.C.No.11/2014.	off. The Project Proponent also submitted the order of Hon'ble High Court of Orissa at Cuttack dated 04.04.2022 in CRLMC no. 3584 of 2017 between the Odisha Mining Corporation Ltd versus State of Odisha and others stating that the <i>CRLMC is allowed in terms of the decision rendered in the aforesaid Criminal Misc, Cases and consequently the criminal prosecution launched against the Petitioner stands quashed.</i>
9	The Project Proponent needs to submit the copies of the certified analysis/testing reports of water, air, soil, noise etc. carried out by MoEF&CC/NABL accredited laboratories.	The Project Proponent has submitted the copies of certified analysis/testing reports of water, air, soil, noise etc. carried out by M/s MECON, Ranchi.

iv. Details of previous Environmental Clearance (EC):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
31.10.2009	J-11015/407/2008-IA.II(M) IA/OR/MIN/8899/2007	-	Environmental Clearance of for an annual production capacity of 14,00,000 tonnes (1.4 million tonnes) of chromite ore by the opencast semi-mechanized method involving total mining lease area of 552.457 ha along with an annual throughput capacity of 4,74,000 tonnes (0.47 million tonnes) of COB plant.	20.07.2010
31.08.2015	J-11015/407/2008-IA.II(M) IA/OR/MIN/8899/2007	September 22-24, 2015 July 21-22, 2016	Amendment in EC dated 20.07.2020 w.r.t shifting the tailing pond area with the additional condition that the Project Proponent will take sufficient precautions and safety measures around the Tailing pond.	06.07.2021

v. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
25.06.2022	J-11015/407/2008-IA.II(M)	27-29 July, 2022 &	Terms of Reference (ToR) for South Kaliapani mine of M/s Odisha Mining	07.11.2022

	IA/OR/MIN/ 279986/202 2	18-20 October, 2022	Corporation Ltd for mining of Chromite Ore without change in production capacity of 1.40 MTPA of Chromite Ore [Total Excavation: 16.64 MTPA (Production: 1.40 MTPA (ROM) + Waste Rock: 15.24 MTPA)] with increase in mine lease area from 552.457 ha to 720.727 ha along with an annual throughput capacity of 4,74,000 tonnes (0.47 million tonnes) of COB plant, located at Villages Kaliapani, Gurujangpal, Sukurangi and Saruabi, Tehsil Sukinda, District Jajpur, Odisha	
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vi. Details of Mine lease:

- a) The Project Proponent submitted that the initially mine lease deed was executed on 22.01.1980 for a period of 20 years for the period up to 21.01.2000. Then, the Project Proponent submitted the application for renewal of mine lease before the expiry of the mine lease period and the lease was under deemed renewal stage.
- b) The Govt. of Odisha vide Order No: 2749/SM dated 26.03.2015 have extended the validity period of the lease from 22.01.2000 to 31.03.2020. Then, the Project Proponent executed the supplementary lease deed for the extended period and registered vide e-Registration ID No. 1871500004 and e-Registration document No. 11871500004 dated 06.10.2015.
- c) Further, Project Proponent submitted that the Govt. of Odisha have extended the validity period of the lease for a period of 50 years from the original period of lease i.e., from 22.01.1980 to 21.01.2030. Accordingly, the Project Proponent executed the supplementary lease deed on 12.08.2016 between the Governor of Odisha and M/s Odisha Mining Corporation Ltd for the period upto 21.01.2030.
- d) Thereafter, the Govt. of Odisha vide Lr No. 10647/III(Cr)SM-03/2013/SM, Bhubaneswar dated 14.12.2021 granted the mining lease over an area of 168.948 ha of non-mineralised land in favour of M/s Odisha Mining Corporation Ltd to be included in its South Kaliapani Chromite Mining lease with existing area of 552.457 ha for a period co-terminus with the validity of the South Kaliapani Chromite Mining lease for the specific use for dumping of overburden dumps (OB) from its existing chromite mines at South Kaliapani and Sukurangi mining lease in Jajpur District.

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

Forest Land	594.346 ha
Private land	8.009 ha
Government land	119.050 ha
Total Mining lease area (MLA)	720.727 ha as per DGPS/ 721.405 ha as per ML grant orders (including 168.948 Ha of additional granted area)
Private land for crusher, workshop & other infrastructure outside the MLA	NA

viii. Details of Mining Plan: -

Modification of Review of Mining Plan along with the Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM)	Letter No.	BBS/JJP/CR/2015/MPM/2022-23	
	Date	12.05.2022	
	Mine Lease area, Ha	720.727 Ha	
	Mineral	Chromite	
	Validity	2022-23 to 2024-25	
Mining Parameters	Quantitative Description		
Method of Mining	Open Cast Mechanized Mining		
Total Mineral Reserves + Resources	1,16,21,334 Tonnes		
Life of mine	9 years		
Bench Height	6 m		
Bench Width	11 m		
Individual bench slope	70 ⁰ -80 ⁰		
Overall pit slope	18-29 ⁰		
Drilling/Blasting	HEMM with deep hole drilling & blasting with combination of loaders and tippers.		
RoM output size	Type of crusher	Product size in mm	
	Hammer Mill (New COBP)	-18	
	Rock Breaker (New COBP)	-300	
	Hammer Mill (Old COBP)	-18	
	Mobile Jaw/Cone Crushing & Screening Plant	-100	
Transportation details	By trucks to nearby railway siding(s) at buyers' discretion		
Dumpers capacity	30-45 T		
Mineral Beneficiation	Crushing & screening. Wet beneficiation of beneficiable ore		
Topsoil	Project Proponent reported that during the initial three years, ~0.193 Mm ³ of top soil is expected to be generated. Top soil will not be stored. Top soil generated will be spread over stabilised portions of the existing external waste dumps as part of biological reclamation.		
Waste Generation	PP reported that it has been estimated that approximately 76.9 million cu.m of overburden		

	will be generated till the end of conceptual period. About 1.672 million tonnes of sub grade material will be generated up to the conceptual stage. ~2.16 MT of tailings will be generated from the COB Plant till end of conceptual period.
Waste Disposal	PP submitted that initially the wastes will be dumped. These dumps will be compacted and afforested on the terraces as well as along the slopes after spreading a layer of top soil over it before rehabilitation.
Present Proposal	PP submitted that the proposed project is only for increase in mine lease area. No increase in production capacity or change in mining technology or increase in beneficiation capacity or change in beneficiation technology are proposed in the present proposal.

ix. Water requirement:

Total water requirement	Potable: 120 m ³ /day	Fresh water	120 m ³ /day
	Industrial: 2200 m ³ /day	Treated water	2200 m ³ /day
Source	Industrial: Recycled effluents/mine discharge water Potable: Bore-wells		
Permission	Project Proponent has submitted that the NOC for groundwater abstraction has been obtained from CGWA vide letter No. CGWA/NOC/MIN/REN/2/2022/7117, dated 26.10.2021 for abstraction of fresh water of 120.0 m ³ /day and dewatering of 21,557 m ³ /day and is valid upto 25.10.2023.		
Additional information (if any)	PP also submitted that no fresh water is utilized for Industrial purpose.		

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

Particulars	Particular's Name	Distance & Direction
Nearest Town	Sukinda	~13.5 km (SE)
Nearest railway station	Baghupal on Padapahar Jn.	~21.5 km (E)
Nearest Highway	Daitari- Paradeep Express Highway	~10 km (NE)
Water Bodies	a. Damsal Nala b. Talangi Nala c. Nadibarana Nala d. Pandaral Nala	0.12 km (N) 2.4 km (NE) 4.8 km (W) 7.7 km (S)

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

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

Forest Land- 594.346 ha	Yes	<p>Project Proponent has submitted that the Stage-II Forest Clearance has been obtained over the forest area of 425.398 ha within the original mine lease area of 552.457 ha in two parts</p> <p>a) MoE&F vide F No. 8-15/2000-FC dated 08.06.2001 accorded diversion for an area of 146.047 ha of already broken up forest land.</p> <p>b) MoE&FCC vide file No. 8-15/2000-FC (Vol.) dated 25.02.2016 accorded diversion for an area of 279.351 ha of forest land including 2.790 ha for safety zone in addition to 146.047 ha of forest land already diverted within total mining lease area of 552.457 ha</p> <p>Project Proponent also submitted that the Stage-I Forest Clearance granted by MoEF&CC vide F No. 8-19/2019- FC dated 15.10.2019 for diversion of 168.948 ha of forest land adjacent to South Kaliapani Mines of OMC for dumping of overburden of South Kaliapani and Sukurangi Chromite Mine.</p>
National park	No	<p>Project Proponent has submitted the map authenticated by the Divisional Forest Officer, Cuttack Forest Division showing the Sanctuaries, Biosphere reserves, Elephant Reserves & Elephant Corridors from the mine lease area.</p>
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area(ESA)	No	
Schedule-I species	Yes	<p>Project Proponent has submitted the authenticated list of Flora and Fauna found within 10 km radius of the study area obtained from the Office of the Divisional Forest Officer, Cuttack Forest Division vide Memo no: 8529/5F (Forest Division) 15/2018, Cuttack dated 19.12.2020.</p> <p>Project Proponent has submitted the approval of Site Specific Wildlife Conservation Plan of South Kaliapani Chromite mines approved by the Chief Conservator of Forests (WL) vide Memo no. 5911/1 WL(C) SSP-351/2012 dated 20.07.2013 with a financial forecast of Rs 2,01,14,080.</p>
Wildlife Conservation Plan	Yes	

xii. Green belt/plantation details:

Minutes of 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023

Proposed area for green belt/plantation	Year	Green Belt Location (s)	Area Proposed to be Covered (Ha)	Number of Plants Proposed	Expected Survival Rate (%)	Estimated Expenditure (INR)
	1 st Yr	Existing Dump	3.7	9,250	>85%	18,96,250
	2 nd Yr	Existing Dump	6.0	15,000	>85%	32,25,000
	3 rd Yr	Existing Dump	6.0	15,000	>85%	33,75,000
Additional information (if any)	Cumulative work done					
	Sr. No	Total Expenditure Incurred up to Last Year (INR)	Area Covered (Ha)	Number of Plants	Survival Rate (%)	
	01.	4,03,52,797	58.52	124659*	85%	
	*The total costing has been for 124659 plantations which includes 16000 nos of Vertiver, Lemon, Palmarosa and Napier grass.					
7.5 m barrier & non-mineralized zone				5.578 ha		

xiii. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)				
Period of baseline data collection	1 st March - 31 st May, 2022			
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer Season 2022			
Predominant Wind direction (From)	East			
Ambient Air Quality (10 locations) and results	S.No	Parameters	Winter Season	Standards ($\mu\text{g}/\text{m}^3$)
	1	PM ₁₀	45.0 – 90.0 $\mu\text{g}/\text{m}^3$	100
	2	PM _{2.5}	26.0 – 58.0 $\mu\text{g}/\text{m}^3$	60
	3	SO ₂	4.0 – 10.0 $\mu\text{g}/\text{m}^3$	80
	4	NO ₂	10.0 – 24.0 $\mu\text{g}/\text{m}^3$	80
	5	CO	0.20 – 1.64 mg/m ³	2.0 mg/m ³
Noise level (10 locations) and results	Day Time: 40.3 to 63.2 Leq dB (A) Night Time: 36.5 to 59.7 Leq dB (A)			
Surface Water Quality (8 no. of locations) and results	Project Proponent has submitted that pH of water samples found in the range of 7.14 to 7.85. The dissolved oxygen varied from 5.8 to 6.9 mg/l. Total coliform results in all the samples are above 500 MPN/ 100 ml which makes these surface water quality falls under Class C i.e. surface water which can be used as drinking water source after conventional treatment and disinfection. Samples were also analysed for			

	Cr ⁺⁶ and total chromium. Hexavalent Chromium found to be in the range from 0.016 to 0.040 mg/l and Total Chromium found to be in the range from 0.041 to 0.089 mg/l.	
Ground Water Quality (8 no. of locations) and results	Project Proponent reported that TDS value was found to be in the range of 74- 434 mg/L; Total alkalinity value: 20-290 mg/L; Total hardness value: 20-304 mg/L; Calcium value: 8-62.4 mg/L and Magnesium value: 1.9-48.5 mg/L. Samples were also analysed for Cr ⁺⁶ and Cr (total) and the concentration of Cr (total) were observed in traces but well within the norm of IS: 10500 (2012) for drinking water quality of 0.05 mg/l.	
Soil Quality (6 no. of locations) and results	Parameters	Observed Values
	pH	4.92 – 6.44
	Electrical Conductivity (µS/cm)	46.3 – 197.6
	Nitrogen as N (Kg/Ha)	369-1430
	Phosphorus (Kg/Ha)	0.109-0.762
	Potassium (Kg/Ha)	148 to 719
Hydro geological study and results	A comprehensive hydrogeological study has been carried out by a CGWA accredited ground water professional to assess the impact on ground water due to workings of South Kaliapani chromite mines. Based on the findings of the report, CGWA has renewed the NOC [CGWA/NOC/MIN/REN/2/2022/7117 upto 25/10/2023 for dewatering 21,557 m ³ /day of mine water and 120 m ³ /day of fresh water for meeting potable water requirement of the project. The calculation given in the hydrogeological report shows that ground water demand in the sub-watershed, in which the mine is located, is a meager fraction of total annual replenishable recharge. There will be no ground water discharge from this mine and no impact on water resources is expected due to this project.	
Traffic study (no. of locations) and results	Project Proponent has submitted that the Traffic density analysis has been carried out at two locations on separate routes; envisaged to be used for ore transportation from the mine site to different customer location. Monitoring was carried out in May 2022. Classified volume count was recorded at hourly intervals for 24 hours continuously. The transportation of over burden to the new dump will be through the haul roads within the mine lease only. Therefore, no additional traffic on the existing public road infrastructure has been envisaged. Chromite is despatched to end-users from South Kaliapani	

	Mines in buyers' trucks through existing roads. Since the proposed expansion project does not envisage any increase in chromite production, mineral despatch from the mine shall remain unchanged. Thus there shall be no change in the traffic pattern on public roads due South Kaliapani Mines' activities.
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xiv. Public Hearing (PH) Details:

Advertisement for PH with date (Name of major national daily and one regional vernacular daily newspaper)	The New Indian Express- 05.04.2023 The Dharitri- 05.04.2023
Date of PH	19.04.2023
Venue	Community Center Ground, OMC township, Kaliapani under Sukinda Tehsil of Jajpur District, Odisha.
Chaired by	Additional District Magistrate, Kalinganagar, Jajpur.
Main issues raised during PH	Related to employment, Health, Education, Drinking water, afforestation, CSR activities, Bus transportation, Dust generation, Environment. etc.
Budget proposed for addressing issues raised during PH	Rs. 1690.63 Lakhs

xv. Details of CTE/CTO, previous EC compliance and Past production:

Particulars	Granted by, Letter no. and date
Consent to Establish (CTE)	Consent to Establish (CTE) was issued by the State Pollution Control Board, Orissa vide letter no: 16706/IND-II-NOC-4702 on dated 06.10.2010 for increase in production of chromite ore (ROM) of quantity up to 14,23,500 Ton/Annum and capacity of existing COB Plant from 1.8 Lakh Ton/Annum to 3.24 Lakh Ton/Annum with additional 1.5 Lakh Ton/Annum new COB Plant (over mine lease hold area of 552.457 ha).
Consent to Operate (CTO)	Consent to Operate (CTO) was issued by the State Pollution Control Board, Odisha vide letter no 3844/IND-I-CON-253(A) with Consent Order No - 368 dated 27.03.2020 for production of 1.4 MTPA of Chrome ore and COB Plant of throughput capacity of 0.47 MTPA and is valid up to 31.03.2025.
Certified Compliance Report	Certified Compliance Report was issued by Integrated Regional Office (IRO), Bhubaneshwar vide File No: 101-284/07/EPE dated 30.05.2023. Site visit was conducted by IRO on 27.04.2023. Project Proponent submitted the action report to the IRO on 08.06.2023.
Certified past production	PP submitted the production details authenticated from the Office of Deputy Director of Mines; Jajpur Road Circle

vide Lr No 815/Mines dated 27.05.2022 from the year 1992-93 to 2021-22.

S. No	Year	Production (MTPA)	EC Capacity (MTPA)	Excess Production (MTPA)
1	1992-93	0.20	-	
2	1993-94	0.20	-	Exceeded the base year production of 1993-94
3	1994-95	0.21	-	
4	1995-96	0.47	-	
5	1996-97	0.34	-	
6	1997-98	0.37	-	
7	1998-99	0.38	-	
8	1999-2000	0.51	-	
9	2000-01	0.24	0.20	0.04
10	2001-02	0.75	0.20	0.54
11	2002-03	0.67	0.20	0.46
12	2003-04	0.71	0.20	0.50
13	2004-05	0.65	0.20	0.44
14	2005-06	0.61	0.20	0.41
15	2006-07	1.20	0.20	0.99
16	2007-08	1.15	0.20	0.94
17	2008-09	0.90	0.20	0.69
18	2009-10	0.49	0.20	0.29
19	2010-11	1.10	0.99	0.02
20	2011-12	0.41	1.40	-
21	2012-13	0.52	1.40	-
22	2013-14	0.48	1.40	-
23	2014-15	0.65	1.40	-
24	2015-16	0.83	1.40	-
25	2016-17	1.00	1.40	-
26	2017-18	0.75	1.40	-
27	2018-19	10.5	1.40	-
28	2019-20	0.71	1.40	-
29	2020-21	0.96	1.40	-
30	2021-22	0.99	1.40	-
31	2022-23	1.00	1.40	-

The Project Proponent has submitted the past production details authenticated by the Dy. Director of Mines, J.K Road vide letter dated 15.09.2022 for chrome ore beneficiation plant for the period 1993-94 to 2021-22.

S. No	Year	Production (in MT)	EC capacity (TPA)
1	1993-94	166.670	-
2	1994-95	1976.290	-
3	1995-96	29,284.290	-
4	1996-97	56,151.900	-

	5	1997-98	71,424.550	-
	6	1998-99	78,176.260	-
	7	1999-2000	1,13,479.240	-
	8	2000-01	1,05,717.500	-
	9	2001-02	3,04,898.910	-
	10	2002-03	2,17,119.600	-
	11	2003-04	1,68,635.000	-
	12	2004-05	1,70,372.040	-
	13	2005-06	1,79,901.170	-
	14	2006-07	1,80,475.638	-
	15	2007-08	1,02,841.237	-
	16	2008-09	44,622.880	-
	17	2009-10	35,286.745	-
	18	2010-11	91,767.605	4,74,000
	19	2011-12	83,583.588	4,74,000
	20	2012-13	83,682.410	4,74,000
	21	2013-14	76,280.070	4,74,000
	22	2014-15	37,445.555	4,74,000
	23	2015-16	29,568.310	4,74,000
	24	2016-17	34,827.845	4,74,000
	25	2017-18	Nil	4,74,000
	26	2018-19	Nil	4,74,000
	27	2019-20	Nil	4,74,000
	28	2020-21	Nil	4,74,000
	29	2021-22	Nil	4,74,000
Compliance of the Hon'ble Supreme Court Order dated 02.08.2017 in the matter of W.P.(C) No.114/14 Common cause vs Union of India and Others	<p>Project Proponent has submitted that in pursuant to the Hon'ble Supreme Court Order dated 02.08.2017 in the matter of W.P.(C) No.114/14 Common cause vs Union of India and Others, it was deemed that during the period 2001-02 to 2010-11, the mine had produced a total of 5384427.613 tonnes of chromite without EC.</p> <p>PP also submitted that the Demand Notice was issued by the Office of Deputy Director of Mines, Jajpur Road Circle, Jajpur Road, vide notice no. 543/Mines dated 10.04.2018 for depositing Rs.1662,85,42,189/- (Rupees One thousand six hundred sixty-two crore eighty-five lakh forty two thousand one hundred eighty nine). PP submitted that the payment for the above said demand was made on 15.03.2022 and submitted the proof for the same.</p> <p>Further, PP submitted the undertaking by way of affidavit as per the Ministry's OM dated 30.05.2018 in a non-judicial stamp paper of Rs 100 bearing K 141113 dated 09.08.2018 stating that M/s OMC shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August 2017 in the matter of Common Cause Vs Union of India & Ors in Writ Petition (Civil) No.</p>			

	114 of 2014.
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xvi. Rehabilitation & Resettlement:

R & R details	The Project Proponent submitted that the mine is already in operation. The additional land allocated is a forest land. Proposed project does not envisage any leasing and / or acquisition of additional private land, hence no rehabilitation & resettlement is required for this project.
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xvii. Court Case details: The Project Proponent has submitted that there is one court case pending in the JMFC Court, Barbil, Odisha vide case. No 2(C)C.Case No.11 of 2014 and the matter is subjudice.

xviii. Undertaking details:

Undertaking by Project Proponent in EIA/EMP report	The Project Proponent has submitted an undertaking vide letter dated 19.06.2023 stating that the prescribed Terms of Reference pertaining to South Kaliapani mine has been complied while conducting the EIA studies. The contents (information and data) as given by the Consultant in the EIA/EMP report are factually correct with full knowledge of the undersigned.
Undertaking by Consultant in EIA/EMP report	The Consultant (M/s MECON Limited) has submitted an undertaking vide letter dated 19.06.2023 that the EIA/EMP report has been prepared as per Terms of Reference prescribed by MoEF&CC vide ToR letter dated 07.11.2022 based on baseline environmental data monitored by Environmental Engineering Laboratory, MECON Limited (CPCB recognized Laboratory) during Summer Season, 2022 and also undertaken that the ToR prescribed for above mentioned project has been complied while conducting the EIA-EMP studies and the data submitted is factually correct.
Plagiarism Certificate	The Head of the Accredited Consultant Organization 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.

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

Activities	Capital Cost (Rs.)	Recurring Cost (Rs. /y)
Pollution control	1,14,00,000	33,98,400
Pollution monitoring (laboratory)	Nil	10,00,000
Occupational safety	5,00,000	-
Green belt & plantation	2,55,62,250	-
Net Present Value (NPV) of Forest	32,72,58,270	-
Compensatory Afforestation	14,49,30,460	-

Wildlife Conservation	2,01,14,080	-
Socio-economic welfare measures in nearby villages (CSR budget)	-	12,52,82,000
Total	52,97,65,060	12,96,80,400
EMP cost for addressing PH issues (formerly called CER)	1690,63,000	-

xx. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP	Capital cost: Rs. ~52,97,65,060/- Recurring cost (per annum): Rs. 12,96,80,400/yr. EMP cost for addressing PH issues (formerly called CER) - Rs. 16,90,63,000/-
Project Cost	Rs. 500 Crores
Employment	Presently, 608 persons are deployed at the mine. After the present proposal no additional employment is envisaged as there is no increase in production.

3. Observation and Recommendation of the EAC:

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent informed the EAC that Comprehensive Geo-Technical Study on Dump Slope Stability over an area of 168.948 Ha of South Kaliapani Chromite was carried out by Indian Institute of Technology (IIT), Kharagpur during November, 2023. The study shows that proposed external dump over an area of 168.948 Ha of South Kaliapani Chromite mine is stable. The Project Proponent informed the EAC that dumping will be carried out as per approved mining plan by Indian Bureau of Mines (IBM) and as per the recommendations of Comprehensive Geo-Technical Study on Dump Slope Stability carried out by Indian Institute of Technology (IIT), Kharagpur. The Project Proponent presented the details quantity of OB to be dumped in 1st year, 2nd year and 3rd year up to conceptual stage and also the conceptual plan. The Project Proponent showed the photographs of the existing OB dump management.

Further, the Project Proponent informed the EAC that periodical health check up indicated that all environmental measures are working effectively and no serious health conditions detected. The Project Proponent showed the records of the occupational health check-up carried out during the FY 2022-23 in the form of IME/PME of the mine workers. The Project Proponent presented the stage wise action plan for cutting the trees from OB dump area. The EAC asked about the majority of trees felled. The Project Proponent informed the EAC that Sal trees are mostly removed. The Project Proponent also informed the EAC that mining plan approved by the Indian Bureau of Mines vide Lr. No: BBS/JJP/CR/2015/MPM/2022-23 dated 12.05.2022 does not include dumping of Overburden from Sukrangi mines in the allocated area of 168.948 ha. The Project Proponent showed the copies of

initial public hearing notice dated 13.02.2023 and reschedule of public hearing notice dated 04.04.2023.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC opined that the Project Proponent needs to devise the action plan for implementation of recommendations of Comprehensive Geo-Technical Study on Dump Slope Stability carried out by Indian Institute of Technology (IIT), Kharagpur. Based on the discussions held, the EAC in its meeting held during 5-7 December, 2023, under the provisions of EIA Notification 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Environmental Clearance to South Kaliapani mine of M/s Odisha Mining Corporation Ltd for mining of Chromite Ore without change in production capacity of 1.40 MTPA of Chromite Ore [Total Excavation: 16.64 MTPA (Production: 1.40 MTPA (ROM) + Waste Rock: 15.24 MTPA)] along with an annual throughput capacity of 4,74,000 tonnes (0.47 million tonnes) of COB plant in the mine lease area of 552.457 ha [Forest land: 425.398 ha + Non-Forest land: 127.059 ha] out of 720.727 ha (DGPS)/ 721.405 ha (RoR), located at Villages Kaliapani, Gurujangpal, Sukurangi and Saruabi, Tehsil Sukinda, District Jajpur, Odisha subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining and Mineral beneficiation projects: -

- i. The instant Environmental Clearance (EC) will be valid up to the mine lease period i.e., 21.01.2030.
- ii. Mining activity is restricted to the forest land (425.398 ha) for which the Stage II FC is available plus the non-forest land (127.059 ha).
- iii. No mining activity shall be carried out in the forest land for which the Stage-II FC is not available.
- iv. The Project Proponent shall dump only the overburden of this instant mine in the allocated area of 168.948 ha which is a part of the mine lease area.
- v. The Project Proponent needs to implement the recommendations of Comprehensive Geo-Technical Study on Dump Slope Stability carried out by Indian Institute of Technology (IIT), Kharagpur. The implementation status of the same shall be submitted to the Regional Office, MoEF&CC.
- vi. The over burden dumps should be stabilized by plantation and ankering with coir nets / blankets. Plantation program needs to be scientifically planned.
- vii. The Project Proponent needs to undertake a periodical health check up once in six months to prevent from the occupational health exposure on

mine workers/local people, land, water bodies and biological environment due to mining activity with respect to hexavalent chromium and total chromium. All the health records need to be maintained digitally.

- viii. The Project Proponent needs to make provision for proper collection arrangement of runoff water from the OB dump area and mineral storage area.
- ix. The Project Proponent needs to take up works for cleaning of the garland drains, stabilizing the retaining wall regularly and also shall take necessary steps for proper terracing the OB dumps.
- x. The Project Proponent shall undertake adequate control measures in areas such as loading and unloading points.
- xi. The Project Proponent needs to make provision for permanent water sprinklers instead of mobile tankers all along the haul road. About, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine lease area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
- xii. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
- xiii. The Project Proponent should follow-up the status of implementation on Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
- xiv. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
- xv. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. The dense plantation shall be

carried out in the vicinity of the crusher. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.

- xvi. The budget of Rs 1690.63 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xvii. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- xviii. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 5297.6506 Lakhs. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.
- xix. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.
- xx. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xxi. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.

- xxii. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment.
- xxiii. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
- xxiv. The instant EC is subject to the outcome of the court case No 2(C)C.Case No.11 of 2014 pending in the JMFC Court, Barbil, Odisha.

2.3 Proposal for Mining of Iron Ore in JillingLangalotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste: 7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of 406.35 ha [Forest land: 342.602 ha + Non-Forest land: 63.748 ha] out of 456.037 ha (as per DGPS)/456.100 ha (as per RoR), located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha - [Proposal No: IA/OR/MIN/440292/2023, IA-J11015/34/2021-IA-II(M), EIA Consultant: M/s. MECON Ltd] - Environmental Clearance (Auction mine)

The instant proposal is for mining of Iron Ore in JillingLangalotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste 7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150

TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of 406.35 ha [Forest land: 342.602 ha + Non-Forest land: 63.748 ha] out of 456.037 ha (as per DGPS)/456.100 ha (as per RoR), located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha.

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

- i. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals 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.
- ii. The mine lease area is located between Latitude 21°56'37.5297"N to 21°08'53.4185"N and Longitude: 85°25'08.8832"E to 85°26'37.1370"E. The mine lease area falls under the Survey of India Toposheet No: 73F/8 and 73G/5 and falls in Seismic Zone-II.
- iii. The instant proposal was earlier considered in the 20thEAC (Non Coal Mining) meeting held during 21-22 September, 2023 wherein the EAC deferred the proposal for want of requisite information. The Project Proponent submitted the information on 17.11.2023 in Parivesh portal and accordingly the proposal was again considered in the 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023.

Based on observation of EAC in its EAC meeting held during 21-22 September, 2023 and compliance of observation of EAC are detailed below:

S. No	Observation of EAC in its meeting held during 21-22 September, 2023	Reply by the Project Proponent				
1	The Project Proponent needs to submit the action plan for strengthening the	The Project Proponent has submitted that a total length of 3833 m of garland drains have been constructed along the retaining walls. The details of existing garland Drains in Jilling-Langalottamines are as follows: -				
		Sl. No.	Location	Length (m)	Latitude (N)	Longitude (E)
		1	Jilling Dump No. 4	586	21°57'57.10"	85°25'52.00"
		2	Jilling Dump No. 6	353	21°57'58.00"	85°26'08.60"
		3	DalkoNalaJilling Side	1100	21°57'23.04"	85°25'41.50"

	<p>garland drains including their dimensions along with the timeline.</p>	<table border="1" data-bbox="443 190 1396 443"> <tr> <td data-bbox="443 190 523 264">4</td> <td data-bbox="523 190 869 264">Dalko Nala Langalotta Side</td> <td data-bbox="869 190 1010 264">1300</td> <td data-bbox="1010 190 1204 264">21°57'22.20"</td> <td data-bbox="1204 190 1396 264">85°35'42.10"</td> </tr> <tr> <td data-bbox="443 264 523 338">5</td> <td data-bbox="523 264 869 338">Langalotta Vibro Fines Dump No. 4</td> <td data-bbox="869 264 1010 338">250</td> <td data-bbox="1010 264 1204 338">21°57'19.50"</td> <td data-bbox="1204 264 1396 338">85°25'47.00"</td> </tr> <tr> <td data-bbox="443 338 523 412">6</td> <td data-bbox="523 338 869 412">Jajang Rly. Siding Dump 6</td> <td data-bbox="869 338 1010 412">64</td> <td data-bbox="1010 338 1204 412">21°56'41.00"</td> <td data-bbox="1204 338 1396 412">85°25'49.10"</td> </tr> <tr> <td data-bbox="443 412 523 443">7</td> <td data-bbox="523 412 869 443">Appahatu Dump No.1</td> <td data-bbox="869 412 1010 443">180</td> <td data-bbox="1010 412 1204 443">21°58'19.90"</td> <td data-bbox="1204 412 1396 443">85°25'29.70"</td> </tr> </table> <p>The Project Proponent also submitted that another 953 m of garland drains is under construction during FY 2023-24 around new Appahatu North & Appahatu South Dumps as proposed in the approved Mining Plan.</p> <p>Further, the Project Proponent has submitted that the existing garland drains shall be renovated with adequate dimensions as mentioned below.</p> <p>Depth : 1500 mm Top Width : 2500 mm Bottom Width : 1500 mm Masonry Thickness: 300 mm</p>	4	Dalko Nala Langalotta Side	1300	21°57'22.20"	85°35'42.10"	5	Langalotta Vibro Fines Dump No. 4	250	21°57'19.50"	85°25'47.00"	6	Jajang Rly. Siding Dump 6	64	21°56'41.00"	85°25'49.10"	7	Appahatu Dump No.1	180	21°58'19.90"	85°25'29.70"
4	Dalko Nala Langalotta Side	1300	21°57'22.20"	85°35'42.10"																		
5	Langalotta Vibro Fines Dump No. 4	250	21°57'19.50"	85°25'47.00"																		
6	Jajang Rly. Siding Dump 6	64	21°56'41.00"	85°25'49.10"																		
7	Appahatu Dump No.1	180	21°58'19.90"	85°25'29.70"																		
2	<p>The EAC was of the view that the linear barriers created for movement of elephants and habitat use needs to be properly addressed in terms of scientific management and a plan for movement of elephants from one forest to the other forest area shall be included in the conservati</p>	<p>The Project Proponent has submitted that the scientific plan for movement of elephants from one forest to the other forest area along with the budget has been prepared by DFO, Keonjhar Forest Division. The following activities are proposed from the Office of the Divisional Forest Officer, Keonjhar Division vide letter dated 30.10.2023 which are as follows: -</p> <ol style="list-style-type: none"> i. Anti-Depradation and Anti-Poaching Squads i. Deployment of one elephant tracker ii. Habitat improvement works like gap planting with indigenous species deweeding over 200 ha. <ol style="list-style-type: none"> i. Soil and moisture conservation measures ii. Construction of game tanks iii. Creation of artificial salt licks and their maintenance. iv. Fire prevention measures v. Immunization of livestocks vi. Measures to prevent casualties due to train accidents vii. Corpus fund viii. Biodiversity monitoring & development of communication network/GIS based maps Satellite maps on GIS domain should be procured every year to know the changing profile of the project area in both dry season and wet season for 10 years preferably using the GIS lab of PCCF (WL), Orissa. ix. Eco-development measures in 10 VSS areas x. Awareness promotion xi. Monitoring & evaluation <p>The Project Proponent also submitted the Elephant movement around Jilling-Langalotta Mines</p> <ol style="list-style-type: none"> i. 1 "Frequently Used Track" ~7 km W & NW of ML ii. 1 "Frequently Used Track" ~3.5 km E & SE of ML on other 																				

<p>on plan. Accordingly, the Project Proponent needs to submit the activities proposed under Wildlife Conservation Plan along with the budget.</p>	<p>side of R. Baitarani iii. 1 "Rarely Used Track" ~5 km N& NW of ML.</p> <p>Further, the Project Proponent has submitted the implementation status of Wildlife Management Plan pertaining to Jilling Langanalota Iron Ore mines which are as follows:</p>			
	Sl. No.	Item	Financial Outlay (Rs. In Lakhs)	Activities undertaken
	1	90.00 ha of ANR plantation as per land use plan	20	96.734 ha of plantations created in ML area
	2	Fire prevention – fire watchers' wages, uniforms, equipment etc.	3.5	Fire watchers engaged during Feb. to June every year
	3	Soil & moisture conservation (SMC) works	10	Various SMC works undertaken in ML area
	4	Rain water harvesting arrangements	10	Arrangements made in township for roof top rain water harvesting. Arrangements also made in mined out areas
	5	Garbage disposal	0	Door to door collection of MSW in township. MSW sorted. Biodegradable MSW vermi-composted
	6	12 km of Photo-voltaic fencing	12	Barbed wire fencing done. OMC undertakes to install photo-voltaic fences around quarries.
	7	Monitoring & evaluation	5	Implementation status of measures suggested in SSWLCP is being monitored periodically
	8	Awareness and publicity	5	Being carried out from time to time
	TOTAL	65.5		
<p>Details of plantation undertaken over 96.734 ha Plantation in Green Belt: : 25.537 ha Plantation in vacant areas & avenue plantation : 7.128 ha Plantation on dumps & backfill areas : 34.069 ha ANR Plantations : 30.000 ha</p>				

Details of year wise plantation:		
Year	No. of Saplings	Locations
2002 - 03	30000	ML Boundary, Behera Quarry, 55 Quarry, Along Nala
2003 - 04	32000	Safety Zone of Roads, Township, Magazine, Jilling Dump, Both Sides of PWD Road
2004 - 05	40000	Safety Zone of Roads, Township, Magazine, Jilling Dump, Both Sides of PWD Road, Rly. Siding
2005 - 06	26500	Jilling dump, Appahatu dump, Behera Quarry, Township, Beside Magazine, Rly. Siding, ML Boundary
2006 - 07	27500	Jilling dump, Railway buffer end, Plot no.187, Boundary line area, Appahatu, Boundary line near Pandiya, Plot 237. & 238 etc.
2007 - 08	25500	Jilling dump, Plot no.187/188, 5.5. Quarry (top & bottom), Buffer zone of railway, Behera Quarry etc.
2008 - 09	25000	Jilling dump, Bottom area of Jilling Shelter, Backside of Geology Deptt., Buffer zone of railway, Crushing plant Jilling, DalkoNala side etc.
2009 - 10	16000	Jilling dump, Bottom area of Jilling Shelter, Backside of Geology Deptt., Jilling Mines road, Boundary Line, Safety Zone Appahatu
2010 - 11	10500	Jilling dump, Back of Geology dept., Jilling mines road, Safety zone area, Appahatu, etc.
2011 - 12	47000	Safety Zone (Appahatu, Jajang, Jilling&Langalotta), Rly. Siding dump, DalkoNala Site, Jilling Dump, along roads, Near Water Treatment Plant, Plot No. 187, Appahatu Area near magazine etc.
2012 - 13	11730	Gap plantation & casualty replacement done in green belt, avenue plantation, waste dump reclaimed area and ANR Plantation.
2013 - 14	15000	

2014 – 15	16000
2015 – 16	19500
2016 - 17	20080
2017 – 18	9800
2018 – 19	13200
2019 – 20	36350

Check dams, retaining walls already constructed across the seasonal channels are as follows:

Sl. No	Location	Latitude (N)	Longitude (E)	Length (m)	Width (m)	Height (m)
1	Jilling Dump No. 4	21°57'57.19"	85°25'52.00"	76	0.5	2.0
2	Jilling Dump No. 5	21°57'53.50"	85°25'52.10"	262	1.0	1.2
3	Jilling Dump Near OCU-2 dump	21°57'53.51"	85°25'52.12"	218	0.6	1.2
4	Jilling Dump near Gurubeda side No. 6	21°57'58.00"	85°26'08.60"	353	0.3	1.7
5	DalkoNala – Jilling Side	21°57'23.04"	85°25'41.50"	1100	0.6	1.1
6	DalkoNala – Langalotta Side	21°57'22.20"	85°25'43.10"	1300	0.6	1.1
7	LangalottaVibro Fines Dump No. 4	21°57'19.50"	85°25'47.00"	250	0.6	1.8
8	Jajang Rly. Siding, Dump 5	21°56'56.10"	85°25'37.60"	1038	0.4	1.8

9	Jajang Rly. Siding, Dump 6	21°56'41.00"	85°25'49.10"	64	0.6	1.1
10	Appahatu Dump No. 01	21°58'19.90"	85°25'29.70"	180	0.6	1.1
Details of Check Dams already constructed:						
Sl. No.	Location	Latitude (N)	Longitude (E)	Size (L x B x H in m)	Particulars of Construction	
1	Near Joda gate on up side	21°58'02.90"	85°25'53.80"	L: 5 m; H: 1.0 m Top Width: 1.0 m Bottom Width: 1.5 m	Masonry with Spillway system & sedimentation tank	
2	Near Joda gate on down side	21°58'02.85"	85°25'53.78"	L: 3 m; H: 1.0 m Top Width: 0.6 m Bottom Width: 0.8 m		
3	Near NSPL camp adjacent to DalkoNala	21°57'20.60"	85°25'45.10"	L: 5 m; H: 1.5 m Top Width: 1.0 m Bottom Width: 1.5 m	Masonry with Spillway system & sedimentation tank	
Details of Settling Pits already constructed:						
Sl. No.	Location	Latitude (N)	Longitude (E)	Length (m)	Width (m)	Depth (m)
Jilling Dump (Gurubeda Site)						
1	Settling Pit - 1	21°57'53.30"	85°26'08.80"	5.3	5.3	2.0
2	Settling Pit - 2	21°57'55.70"	85°26'07.90"	5.0	4.0	1.5

		3	Settling Pit - 3	21°57'57.90"	85°26'08.90"	6.0	4.0	1.6												
		Jilling Dump Near Joda Gate																		
		4	Settling Pit - 1	21°57'51.80"	85°22'50.70"	4.2	2.9	1.7												
		5	Settling Pit - 2	21°57'48.20"	85°25'50.10"	4.5	4.3	1.8												
		6	Settling Pit - 3	21°57'48.00"	85°25'52.90"	3.3	3.0	1.7												
		7	Settling Pit - 4	21°57'46.20"	85°25'49.80"	10.0	3.8	3.0												
		8	Langalot ta Pit	21°57'18.30"	85°25'38.90"	12.0	4.0	3.0												
3	The Project Proponent needs to submit the action taken report for the non-compliances identified by the Regional Office.	<p>The Project Proponent has submitted the action taken report for the non-compliances identified by the Regional Office as given below: -</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Non-Compliance</th> <th>Compliance by Project Proponent</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>Greenbelt may be increased</td> <td>Plantation in vacant places within ML and OB dumps has been done to increase the greenbelt. The Project Proponent also submitted the photographs of the plantation undertaken in vacant places within ML and OB dumps.</td> </tr> <tr> <td>b)</td> <td>Reclamation of backfilled area with vegetation may be initiated</td> <td>At present, backfilling is going on for which plantation has not been started.</td> </tr> <tr> <td>c)</td> <td>Density of plantation may be increased</td> <td>In the year 2022-23 and in the current year 2023-24, plantation has been done through OFDC, A Govt, of Odisha Undertaking @ 1600 nos. seedlings per ha. The Project Proponent also submitted the joint verification report for plantation work done by Odisha Forest Development Corporation Ltd (OFDC).</td> </tr> </tbody> </table>							Sl. No.	Non-Compliance	Compliance by Project Proponent	a)	Greenbelt may be increased	Plantation in vacant places within ML and OB dumps has been done to increase the greenbelt. The Project Proponent also submitted the photographs of the plantation undertaken in vacant places within ML and OB dumps.	b)	Reclamation of backfilled area with vegetation may be initiated	At present, backfilling is going on for which plantation has not been started.	c)	Density of plantation may be increased	In the year 2022-23 and in the current year 2023-24, plantation has been done through OFDC, A Govt, of Odisha Undertaking @ 1600 nos. seedlings per ha. The Project Proponent also submitted the joint verification report for plantation work done by Odisha Forest Development Corporation Ltd (OFDC).
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4	The Project Proponent needs to submit the treatment methods to	<p>The Project Proponent has submitted that Ground water quality monitoring is being regularly done on monthly basis through Visiontek Consultancy Services Pvt. Ltd. - a MoEF&CC recognized Agency as well as NABL accredited lab. As per last 6 months' report from May, 2023 to Sept., 2023 iron content in ground water is well within the permissible limit. However, for overall treatment of water to be made fit for drinking, a Water</p>																		

	eliminate iron in groundwater so as to make it fit for drinking purpose.	<p>Treatment Plant (WTP) of 30 KLD has been installed within the mines premises, which caters to the drinking purpose.</p> <p>The Project Proponent also submitted the report of ground water analysis for which the water samples collected on 16.05.2023, 14.06.2023, 18.07.2023, 14.08.2023 & 18.09.2023. Further, the Project Proponent has submitted the photographs of the installed WTP.</p>
5	The Project Proponent needs to clarify whether any court case/litigation pending against the previous lessee w.r.t temporary working permit and whether the same has been transferred to M/s Odisha Mining Corporation Ltd or not.	The Project Proponent has submitted that no Court case/litigation pending against the previous lessee. Temporary working permit has been transferred to OMC.
6	The Project Proponent should submit measures taken to prevent contaminated water meeting Baitarani river.	<p>The Project Proponent has submitted that Baitarani River flows from N to S ~0.5 km, E (aerial distance) of ML area. DalkoNala flows through the centre of the lease (from W to E) to join the Baitarani river ~0.6 km east of the mine lease. Most natural drainage from the mine lease flows into DalkoNala. OMC has adopted the following measures to prevent contaminated water from flowing into the DalkoNala (and consequently into the Baitarani River) which are as follows: -</p> <ol style="list-style-type: none"> i. Safety Zone of adequate width is maintained all along the course of the DalkoNala within the Lease. The safety zone has been thickly vegetated. ii. Jilling-Gangaigora Quarry located N of DalkoNala; Jajang-Langalotta Quarry located S of DalkoNala. Adequate separation is maintained between the DalkoNala and the quarry rims. Rims of both quarries are at higher levels than DalkoNala, which prevents surface run-offs, if any, from the

		<p>quarries from flowing into DalkoNala.</p> <ul style="list-style-type: none"> iii. DalkoNala flows from S to N just beyond the western boundary of the ML area's southern half (before turning towards the east). The old external dump on the south-western side of the ML area has been stabilized and properly revegetated to minimize debris from flowing down towards the DalkoNala with storm water. In addition, there is a retaining wall and garland drain at the toe of the dump. The garland drain is routed through settling pits which are desilted regularly to ensure their efficacy. iv. All existing dumps are located well away from DalkoNala. At the toe of the dumps, there are engineered retaining walls and garland drains. The garland drains are routed to guard ponds which act as settling pits. v. No water accumulated in the quarries is discharged. The accumulated water is utilized for meeting the mine's industrial water requirements. vi. The mine operates on a ZLD Basis. All industrial and domestic effluents are collected, treated and used for meeting the mine's industrial water requirements. <p>Further, the Project Proponent has submitted that the Baitarani River flows from S to N a short distance beyond the ML's eastern boundary. No external dumps are located on the ML's eastern side. Eastern rims of Jilling-Gangaigora and Jajang-Langalotta Quarries are well above the level of the Baitarani River. A thickly vegetated Safety zone is also maintained between the eastern rims of the two quarries and the ML boundary. These features prevent contaminated water from flowing down directly into Baitarani River.</p>
7	<p>The Project Proponent needs to submit the action plan for effective dust suppression system near haul roads and crushers with a provision for installation of online dust monitoring</p>	<p>The Project Proponent has submitted that for dust suppression on haul roads, fixed type water sprinklers over a length of approximately 2 km have been installed. Mobile mist canons have been placed at the crushing units for effective dust suppression. Apart from above, to check the status of dust concentration in ambient air, 3 no.s of Continuous Ambient Air Quality Monitoring Systems (CAAQMS) with real-time data transmission facility to the SPCB server have been installed at (i) near Mines Entry / Exit Gate (ii) near Rly. Siding Area and (iii) near Appahatu Quarry. CAAQMS have online monitoring of PM10, PM2.5, CO, SO2 and NOx analysers. The Project Proponent also submitted the photographs of CAAQMS installed at three locations.</p>

system.

- iv. The Project Proponent has submitted that the previous lessee obtained Environmental Clearance for a production capacity of 6.28 MTPA of Iron Ore vide EC letter J-11015/959/2007-IA-II (M) dated 7th June 2012.
- v. Details of Terms of Reference (ToR):

Date of application	File. No/ Proposal No	Consideration	Details	Date of accord
13.04.2021	IA-J11015/ 34/2021-IA- II(M) IA/OR/MIN/ 207724/2021	13-16 July, 2021	Terms of Reference of M/s Odisha Mining Corporation for JillingLangalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 15.668 Million TPA [Saleable Iron ore-9.239 Million TPA, Mineral rejects-0.761 Million TPA, Waste 5.668 Million TPA, Topsoil: Nil] with proposed 1 x 2000 TPH stationary multistage crushing & screening plant along with existing 1x300 TPH Stationary Crusher Plant (In pit plant), 1x300 TPH Stationary Crusher Plant (OCU1), 1 x 200 TPH Stationary Crusher Plant (OCU-2), 1 x 300 TPH Stationary Crusher Plant (OCU-3), 1 x 200 TPH Stationary Crusher Plant (OCU-5), 1 x 400 TPH Mobile Crusher Plant, 1 x 50 TPH Stationary Screening Plant, 1 x 150 TPH Mobile Screening Plant, 1 x 100 TPH Mobile Screening Plant, 5 x 150 TPH Mobile Screening Plant	04.08.2021

			at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	
26.10.2022	IA-J11015/ 34/2021-IA- II(M) IA/OR/MIN/ 292822/2022	9-11 November, 2022	Amendment in Terms of Reference (ToR) dated 04.08.2021 for M/s Odisha Mining Corporation Limited for Jilling Langalotta Iron Ore Mine [456.037 ha (as per DGPS)/456.100 ha (as per RoR)] with total excavation of 17.4385 Million TPA [Saleable Iron ore-7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste-7.4385 Million TPA, Topsoil: Nil] along with Existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity – 1000 TPH (Portable Screening Units), 4 x	28.11.2022

			250 TPH, located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha	
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vi. Details of Mine Lease:-

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	Reservation of Jilling-Langlotta Iron Ore vide No 299/ IV(AB)SM-01/ 2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
2	Letter of Intent vide 307/IV(AB) SM-01/2021/SM, Bhubaneshwar	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
3	Order No 317/IV (AB) SM-01/ 2021/SM and Order is valid for a period of 2 years from the date of execution of the lease deed or till the date of getting fresh approvals, clearances, licenses, permits and the like whichever is earlier.	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
4	Grant of mining lease vide order no 338/SM	11.01.2021	Iron Ore	10 years	Govt of Odisha	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)

vii. 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.	11.01.2021	10.01.2031	Certificate No: IN-OD01560940427432T
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viii. Land Use/Land Cover of the Mine Lease Area:

Private land	42.001 ha
Forest Land	392.289 ha (including 26.99 ha of forest land acquired by Daitari-Bansapani Rail link)
Non-Forest Govt. Land	21.747 ha
Total Mining lease area (MLA)	456.037 ha (as per DGPS Survey)/ 456.100 ha as per RoR
Private land for crusher, workshop & other infrastructure outside the MLA	All facilities within ML Area
Additional information(if any)	The Padapahar Jn. – Joda – Kendujhargarh - Jakhapura Railway Line passes through the ML area occupying 34.967 ha area. This includes 26.990 ha of Forest Land. Indian Railways had taken separate permission for construction of this Railway Line. OMC's existing operations are beyond this railway corridor and the status quo shall be maintained.

ix. Details of Mining Plan: -

Modification of Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines	Letter No.	Lr No. MPM/A/15-ORI/BHU/2021-22/1241
	Date	18.11.2021
	MLA	456.037 ha (as per DGPS)/ 456.100 ha ha (as per RoR)
	Mineral	Iron Ore (Major Mineral)
	Validity	Up to 2024 - 25
Additional information (if any)	On account of correction in the waste quantity, a corrigendum to the Mining Plan Approval Letter was issued by IBM vide letter No. ORI/IRON/KJR/MCDR-93/BBS dated 11.10.2022	
Mining Parameters	Quantitative Description	
Method of Mining	Fully Mechanised Open Cast Mining	
Drilling/Blasting	In Jilling-Langalotta, Jilling-Gangaigora and Appahatu quarries 13 m and 11 m deep boreholes respectively will be drilled using 115 - 150 mm dia DTH drills. These will be filled with explosives and blasted. The powder factor has been estimated to be 12 t/kg. The explosives consumption at the 6.28 MTPA stage ~875 t/yr which is expected to increase to 1306 t/yr at the 10 MTPA stage.	
Bench Height	10 m	
Bench Width	10 - 15 m	
Individual bench slope	80° - 85°	
Overall pit slope	45°	
Life of mine	8 years incl. present plan period. May be revised on basis if	

	reserves are updated on basis of further detailed exploration
RoM output size	10.0 MTPA
Transportation details	At least 70% of the production will be despatched by railway wagons from private siding located within ML area. Max. 30% of production will be despatched by road.
Dumpers capacity	28 nos. 60 t capacity + 40 nos. 80 t capacity
OB/Waste	About 11.59 Mm ³ overburden will be generated and 1.74 Mm ³ will be dumped in existing active external OB dump within ML. About 0.528 Mm ³ will be dumped in 2 new external OB dump within mine lease. Balance 9.32 Mm ³ will be used for backfilling exhausted quarries. All mineral rejects, generated during the residual mine life to be blended with high quality iron ore & sold. Accumulated stock of mineral rejects, presently dumped in 2 nos. external dumps to be re-handled and sold off with / without blending. Any top soil to be generated shall be concurrently used in plantation.
Additional information (if any)	One of the existing open cast quarries (out of the four) exhausted. These will be backfilled.

x. Water requirement:

Total water requirement	1166 m ³ /day	Fresh water	916 m ³ /day
		Treated water	250 m ³ /day
Source	Ground water and Surface water		
Permission	No Objection Certificate has been obtained from CGWA vide letter no. CGWA/NOC/MIN/REN/1/2023/7964 dated 22-06-2023 for abstraction of fresh water of 480 m ³ /day and is valid up to the period 30.03.2024.		
Additional information (if any)	In future, about 916 m ³ /day of fresh water is required, 436 m ³ /day shall be drawn from DalkoNala which flows through the ML area. OMC is submitting an application to the Department of Water Resources, Govt. of Odisha for drawal of water from DalkoNala. The balance 480 m ³ /day (only for potable use) shall be drawn from bore-wells.		

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

Particulars	Particular's Name	Distance & Directions
Village	Jalahari Jurudi	Part of Village located within NW part of ML area Adjacent to M.L. area on West
Town	Joda	~2.5 km N
Highway	Expressway No. 2 NH-215	Expressway No. 2 passes through ML area NH-520: ~6.8 Km N
Interstate Boundary	Odisha-Jharkhand	~15.2 km, NE
Railway Station/line	Jalhari	~0.7 km W of ML
	SE-Rly.'s Padapahar Jn.– Banspani – Keonjhar – Jakhapura Jn. B.G. Main Line passes through ML	

Water body	Dalko Nala Baitarani River	Flows from W to E through approx. Middle of ML area ~0.5 km, E
Monument	None within 15 km	

xii. 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	An area of 392.289 ha of forest land lies within mine lease area. Stage II FC obtained vide Lr No F.No-8-49/98FC(pt) dated 8 th October 2014 for an area of 342.602 ha of forest land. An application for diversion of balance area of 22.697 ha of forest land has been submitted vide proposal no. FP/OR/MIN/142115/2021 dated 08.05.2021. Compliance to the ADS sought by MoEFCC during scrutiny of Stage-I FC compliance is under recommendation process by State Forest Dept. Net Present Value (NPV) of the Forest amounting to Rs. 27,71,46,750/- has been paid.
National park	No	Nil within 10 km radius
Wildlife Sanctuary	No	
Eco-Sensitive Zone(ESZ)/Eco-Sensitive Area(ESA)	No	
Wildlife corridor, migration route etc.	No	Karo-Karampada Elephant corridor: ~18 km, NW
Schedule-I Species	Yes	Indian Elephant, Sloth-bear & Mouse Deer as per the list authenticated by DFO Keonjhar Division.
Wildlife Conservation Plan	Yes	Site-Specific Conservation Plan has been prepared and approved by the PCCF (WL) vide letter No.10895 dt.15.12.2010. Total financial out lay: Rs.412.00 lakhs .

xiii. Green belt/plantation details:

Proposed area for green belt/plantation	183.718 ha at Conceptual Stage
Budget for green plant & plantation till the end of life of mine.	Rs 4,54,50,000/- (Rupees Four Crore Fifty Four Lakhs Fifty Thousand Only)
Budget for nursery	Nil as plantation will be outsourced to Odisha State Forest Development Corporation (a Govt. of Odisha entity) who has their own nurseries.
7.5 m barrier & non-mineralized	83.0191 ha (40.696 ha over external dumps +

zone	39.5539 ha mineral storage area + 2.7692 ha mineral processing area)
50 m safety zone of nallah, roads, electric lines	Included in above
500 m safety zones of nearest habitation villages	-
Additional information (if any)	Plantations over an area of 1.91 ha of exhausted quarry benches & backfilled areas

xiv. Baseline details:

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)			
Period of baseline data collection	01-10-2021 to 31-12-2021		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Post-Monsoon Season		
Predominant Wind direction (From)	West		
Ambient Air Quality (no. of locations) and results	No. of Location	Parameters	Results
	9	PM10	44.0 to 95.0 $\mu\text{g}/\text{m}^3$
		PM2.5	27.0 to 55.0 $\mu\text{g}/\text{m}^3$
		SO2	4.0 to 10.2 $\mu\text{g}/\text{m}^3$
		NO2	10.3 to 22.0 $\mu\text{g}/\text{m}^3$
CO		0.087 to 1.654 mg/m^3	
Noise level (no. of locations) and results	No. of Location	Parameters	Results
	08	During Day Time [Leq dB(A)]	38.1 to 56.4
		During Night Time [Leq dB(A)]	37.1 to 45.8
Water Quality (no. of locations) and results	Ground water quality		
	No. of Location	Parameters	Results
	06	pH	6.71 to 7.08
		TDS (mg/l)	54 to 306
		Fluoride (mg/l)	0.1 to 0.24
		Chloride (mg/l)	13.5 to 61.7
		Fe (mg/l)	0.05 to 1.96
	Surface Water Quality		
	No. of Location	Parameters	Results
	06	pH	6.94 to 7.26
DO (mg/l)		5.6 to 6.8	
BOD (mg/l)		2.0 to 3.0	
Total Coliform (MPN/100 ml)		1000 – 1700	
Soil Quality (no. of locations) and results	No. of Location	Parameters	Results
	06	pH	5.67 to 7.62
		Electrical Conductivity ($\mu\text{S}/\text{cm}$)	49.7 to 254

		Organic Matter (%)	0.84 to 5.91
		Available Nitrogen (kg/ha)	50 to 188
		Available Phosphorus (kg/ha)	0.2 to 3.1
		Available Potassium (kg/ha)	98 to 476
Traffic study (no. of locations) and results	The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs (see Table 3.53.2 in Chapter 3). It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck = 3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume. The maximum daily traffic on this road as monitored in December, 2021 was 12697 PCUs. It is expected that expansion of the mine will lead to increase in vehicular traffic by ~1140 PCUs per day (1 truck = 3 PCUs). Thus the resultant vehicular traffic (~13,840 PCUs/day) will remain much below the maximum design service volume.		

xv. Public Hearing (PH) Details:

Advertisement for PH with date	<ul style="list-style-type: none"> ❖ English daily newspaper: “The New Indian Express”, Bhubaneshwar edition dated 06 April, 2023 ❖ Odiya daily newspaper: “The Pragatvadi”, Bhubaneshwar edition dated 06 April, 2023
Date of PH	09 th May, 2023
Venue	JalahariMouza (Khata No. 34, Plot Nos. 253, 254 & 253/431), Barbil Tehsil, Keonjhar District
Chaired by	ShriJadumaniMahala, OAS, (SAG), Addl. District Magistrate (Revenue), Keonjhar
Main issues raised during PH	<ul style="list-style-type: none"> a) Employment b) Supply of clean drinking water c) Improvement in education facilities and infrastructure d) Improvement in health care delivery systems e) Air pollution and diseases due to air pollution f) Poor conditions of roads g) Need for support to Self Help Groups (SHGs) l) Garbage disposal
Budget proposed for addressing issues raised during PH	Rs. 1865.582 Lakhs (To be spent over 3 years)
Additional information (if any)	Meeting attended by 482 persons including 328 persons from the Core Zone Villages. 39 persons (37 from the Core Zone villages). 33 written representations also have been received.

xvi. Details of CTE, CTO, Certified Compliance Report and Past production details:-

Consent to Establish (CTE)	Odisha State Pollution Control Board granted the Consent to Establish vide order dated 09.08.2018 in favour of M/s Essel Mining and Industries Limited.			
Consent to Operate (CTO)	Odisha State Pollution Control Board granted the Consent to Operate vide order dated 31.03.2022 for production of Iron Ore (ROM) 6.28 MTPA and the consent order is valid for the period 01.04.2022 to 31.03.2023 in favour of M/s OMC Ltd.			
Certified Compliance Report (CCR)	Certified Compliance report issued by the Regional Office, MoEF&CC vide F.No: 101-420/23/EPE dated 09.08.2023 for the EC dated 07.06.2012. Site visit was conducted on 07.07.2023.			
Past production	Certified production details issued by the Dy. Director of Mines vide Lr.Memo No: 2265/Mines, dated 18.05.2021 for the period 1994-95 to 2022-23.			
	Year of Production	EC sanctioned capacity (t)	Actual Production (t)	Excess Production beyond the EC sanctioned capacity
	1993-94	-	-	-
	1994-95	-	442127	-
	1995-96	-	555942	-
	1996-97	-	622305	-
	1997-98	-	922181	-
	1998-99	-	934156	-
	1999-00	-	819426	-
	2000 – 01	-	1277927	-
	2001 – 02	-	1613107	-
	2002 – 03	-	1967094	-
	2003 – 04	-	2054898	-
	2004 – 05	-	3378059	-
	2005 – 06	4200000	3856454	-
	2006 – 07	4200000	3460258	-
	2007 – 08	4200000	3997499	-
	2008 – 09	4200000	4599848	399848
	2009 – 10	4200000	4224984	24984
	2010 - 11	4200000	2947756	0
	2011 - 12	4200000	172558	0
	2012 - 13	6280000	2306742	0
	2013 - 14	6280000	2683497	0
	2014 - 15	6280000	0	0
	2015 - 16	6280000	0	0
	2016 - 17	6280000	0	0
	2017– 18	6280000	447629	0

	2018- 19	6280000	6271381	0
	2019 - 20	6280000	6268396	0
	2020 - 21	6280000	196350	0
	2021 - 22	6280000	5653000	0
	2022 - 23	6280000	6280000	0

Compliance of Hon'ble Supreme Court order dated 02.08.2017

A request letter was submitted by OMC to Jt. Director of Mines, Joda, Dept. of Steel & Mines with a request to duly authenticate the production figures since inception of mine and to provide the details of demand served to the ex-lessee, if any, for the Ores/Minerals raised in excess of the approved quantity with respect to EC for violation of EP Act, 1986 and violation of Mining Plan and CTO pertaining to Jilling-Langalotta Iron Ore Mining Project. In response to the above, Joint Director Mines, Joda, District Keonjhar vide letter dated 30.12.2021 has provided the certificate regarding payment towards compensation for excess production made by Ex-lessee.

Details of Demand Notices and Status-Common Cause Judgement

S.No	Details of Violation	Demand Notice	Amount
1	EC	Demand Notice No. 4040/ Mines dt.02.09.2017	Rs.641,2432,386/-
2	FC	Demand Notice No.6375/Mines, dt. 26. 12.2017	Rs.1056,05,98,961/-
3	MP/CTO	Demand Notice No.3862/Mines, dt. 19.09.2018	Rs. 128,12,05,207/-

As per records available, M/s. Essel Mining & Industries Ltd, had deposited a total of Rs. 1825,87,36,554/- towards the compensation amount in the designated bank account as directed by the Hon'ble Supreme Court vide order W.P. (C) No. 114/2014 (Common Cause) dated 02.08.2017. Further, OMC started operating Jilling-Langalotta Mine with effect from 28-02-2021. Since then, no Environment & Forest related violation has been reported in respect of Jilling-Langalotta Iron Ore Mines.

Project Proponent has submitted the Certificate from the Office of the Joint Director Mines Joda, Dist; Keonjhar vide No. 7304/Mines, dated 30.12.2021 certifying that the present lessee M/s Odisha Mining

	<p>Corporation Limited is confined the mining activity within the granted and executed leasehold area.</p> <p>Project Proponent also submitted the Affidavit in a non-judicial stamp paper of Rs 100 bearing no. M 054791 dated 09.07.2021 stating that the M/s OMC shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Others before grant of ToR/EC pertaining to Jilling-Langalota Iron Ore mining project.</p>
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xvii. Rehabilitation & Resettlement (R&R):

R & R details	Present proposal does not involve any land acquisition. There are some patches of private land within the ML area but these will not be acquired. Thus the project does not involve any R & R of land oustees.
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xviii. Court case details:

Court Case	The Project Proponent submitted they do not have any litigation and also not received any court notice so far in respect of Jilling-Langalotta Mines after allotment of the mine to OMC.
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xix. Affidavit/Undertaking details:

Project Proponent submitted an Undertaking vide letter dated 09.08.2023	The Project Proponent has submitted an undertaking stating that the prescribed Terms of Reference has been complied while conducting the EIA Studies. The contents (information and data) as given by the Consultant in the EIA/EMP report are factually correct with full knowledge.
Consultant submitted an Undertaking vide letter dated 10.08.2023	The EIA/EMP report has been prepared as per ToR prescribed by MoEF&CC vide ToR letter dated 04.08.2021 and amended ToR letter dated 28.11.2022 based on baseline environmental data monitored by Environmental Engineering Laboratory, MECON Limited (CPCB recognized Laboratory) during Post-Monsoon Season 2021 and ToR prescribed for above mentioned project has been complied while conducting the EIA-EMP studies and the data submitted is factually correct.

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

Activities	Recurring cost (Lakhs Rs./yr)	Capital cost (Lakhs Rs.)
Pollution control	45	423 ^a
Pollution monitoring (laboratory)& CAAQMS	42 ^b	400
Occupational safety	50 ^c	20 ^d
Green belt & plantation at safety zone	-	454.5 ^e
Net Present Value(NPV) of Forest	-	2771.47

Compensatory Afforestation	-	61.995
Wildlife Conservation	6.55 ^g	346.50 ^f
Socio-economic welfare measures in nearby villages (CSR budget)	57.51 ^h	-
Budget for addressing Public Hearing commitments (erstwhile known as CER)	-	1865.58 ⁱ
Total	201.06	~6343.045
<p><i>Note:</i> <i>a =Surface drainage (garland drains, settlement pits, retaining wall etc.) + dust suppression system.</i> <i>b =Cost for EMC (Environmental monitoring work is outsourced to accredited labs)& AMC of CAAQMS installed</i> <i>c =Cost towards routine medical examinations, training & awareness</i> <i>d =Cost of safety appliances procurement</i> <i>e =On Basis of costs prevailing in 2022 – 23.</i> <i>f = To be deposited with Divisional Forest Officer</i> <i>g = Rs. 65.5 Lakhs to be spent over 10 years</i> <i>h = Budget for 2022-23. Likely to be revised every year.</i> <i>i = This money will be spent over a period of three years</i></p>		

xxi. Details of project cost and employment:

Particulars	(Rs. In Crore)
Total cost of EMP (Capital Cost of EMP)	EMP Capital Cost: Rs.44.77 Crores
Project Cost	Rs.431 Crores
Employment	488 Nos.

3. Observation and Recommendation of the EAC:

The EAC deliberated on the additional details submitted by the Project Proponent and the Consultant. The Project Proponent informed the EAC that there is no proposal to set up beneficiation plant. The Project Proponent also informed the EAC that till date about seven no. of garland drains have been constructed with a total length of 3.83 km. Another 953 m of garland drain is under construction as per approved mining plan for the FY 2023-24 around new Appahatu North & Appahatu South Dumps. Further, the Project Proponent informed the EAC that the existing garland drains renovated with adequate dimensions as follows; (i) Depth: 1500 mm, (ii) Top width: 2500 mm, (iii) Bottom width: 1500 mm and (iv) Masonry thickness: 300 mm. New garland drains are being constructed as per above dimensions.

The Project Proponent informed the EAC that the following mitigative measures has been proposed to be included in revised Site-Specific Wildlife Conservation Plan to address impact of linear barrier for smooth movement of elephants from one forest to another with a budget of Rs 100 Lakhs only after due approval of PCCF(WL) & CWLW, Odisha are as follows: (i) Enrichment by plantation: Planting of Bamboo (preferably sowing of seed bal method) and Sal, (ii) Deployment of Gajasathi a participatory approach, (iii) Trench fencing over 3 km to funnel elephant to adjoining forest patches, (iv) Distribution of Metal grain bin (1 Qts)

capacity, (v) Training and create awareness among villagers/VSS members students of educational institutions/village level volunteers for wildlife conservation and protection, (vi) Installation of solar street light with EWS, (vii) Development of Meadows (Available Gochar lands Government vacant lands) in the frequent elephant movement area and (viii) EPA in terms of livelihood to forest fringe villagers. The Project Proponent also informed the EAC that the action taken report for the non-compliances was submitted to the Regional Office (RO). The closure report will be shortly issued by the Regional Office (RO).

Further, the Project Proponent informed the EAC that as per last 6 months report from May, 2023 to Sept. 2023, iron content in ground water is well within the permissible limit. Drinking water treatment plant of 30.0 KLD has been installed within the mine lease area. The Project Proponent informed the EAC that no court case/litigation pending against the previous lessee w.r.t temporary working permit. The Project Proponent informed the EAC that the Baitarani River flows from S to N a short distance beyond the ML's eastern boundary. No external dumps are located on the ML's eastern side. Eastern rims of Jilling-Gangaigora and Jajang-Langalotta Quarries are well above the level of the Baitarani River. A thickly vegetated safety zone maintained between the eastern rims of the two quarries and the ML boundary. These features prevent contaminated water from flowing down directly into Baitarani River. The Project Proponent informed the EAC that fixed type water sprinklers over a length of approximately 2 km have been installed for dust suppression on haul roads. Mobile mist canons have been placed at the crushing units for effective dust suppression. About 3 nos. of Continuous Ambient Air Quality Monitoring Systems (CAAQMS) with real-time data transmission facility to the SPCB server have been installed at (i) near Mines Entry / Exit Gate, (ii) near Rly. Siding Area and (iii) near Appahatu Quarry. The Project Proponent showed the photographs of mobile water sprinklers, fixed type water sprinklers on haul road, mist canons at crushing units and CAAQMS.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its meeting held during 5-7 December, 2023, under the provisions of EIA Notification 2006 and its subsequent amendments therein, **recommended** the proposal for grant of Environmental Clearance to for mining of Iron Ore in JillingLangalotta Iron Ore Mine of M/s Odisha Mining Corporation Limited with total excavation of 17.4385 Million TPA [Saleable Iron ore- 7.7723 Million TPA, Mineral rejects-2.2276 Million TPA, Waste 7.4385 Million TPA, Topsoil: Nil] along with existing: 5 nos. with Total Capacity - 1400 TPH (Stationary Crushing Unit), 2 x 300 TPH, 2 x 200 TPH, 1 x 400 TPH, Existing: 3 nos. with Total Capacity - 150 TPH (Mobile Screening Unit), 1 x 150 TPH Mobile Screening Plant 1 x 50 TPH, Stationary Screening Plant, 1 x 100 TPH Mobile Screening Plant, New: 10 nos. with Total Capacity - 4550 TPH (Crushing Unit), 1x800 TPH, 3 x 600 TPH, 3 x 400 TPH, 1 x 300 TPH, 1 x 250 TPH, 1x 200 TPH, New: 4 nos. with Total Capacity - 1000 TPH (Portable Screening Units), 4 x 250 TPH in the mine lease area of 406.35 ha [Forest

land: 342.602 ha + Non-Forest land: 63.748 ha] out of 456.037 ha (as per DGPS)/456.100 ha (as per RoR)] located at Village(s) Jalahari, Jurudi, Banspani, Khuntapani, Bholebeda, Jajang, Baitarani Reserve Forest in Barbil Tehsil, Keonjhar District, Odisha subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects: -

- i. The instant Environmental Clearance (EC) will be valid up to the mine lease period i.e., 10.01.2031.
- ii. Mining activity is restricted to the forest land (342.602 ha) for which the Stage II FC is available plus the non-forest land (63.748 ha).
- iii. No mining activity shall be carried out in the forest land for which the Stage-II FC is not available.
- iv. The Project Proponent shall adhere to the Ministry's letter dated 07.07.2021 regarding Guidelines under Forest (Conservation) Act, 1980 for transfer of approvals granted under the Forest (Conservation) Act, 1980 to mining leases allotted to new lessee as per the provisions of the Mines and Minerals (Development and Regulation) Amendment Act, 2021.
- v. The Project Proponent shall ensure that the low grade ore shall be effectively utilized.
- vi. No water bodies shall be disturbed at any stage of mining activity. The Project Proponent needs to undertake adequate measures to prevent contaminated water meeting Baitarani river.
- vii. The Project Proponent should follow-up the implementation status on Site-Specific Wildlife Conservation Plan including the scientific plan for movement of elephants from one forest to the other forest area from the Forest Officials and the same shall be submitted to the Ministry's Regional Office in the six monthly compliance report.
- viii. The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the vicinity of the mine lease area as well as in study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimise stress conditions for wild animals and to avoid Man-Animal conflict.
- ix. The Project Proponent needs to strengthen the garland drain. Regular maintenance of surface water management structures has to be carried out to prevent and control the water pollution and soil erosion. The Project Proponent shall take adequate measures to prevent the washout of fines during monsoon season.

- x. The Project Proponent needs to undertake the gap plantation in vacant places to increase the density of the plantation.
- xi. The Project Proponent needs to make provision for permanent water sprinklers instead of mobile tankers all along the haul road. About, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine lease area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
- xii. The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, crusher and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
- xiii. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, and other areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions. The dense plantation shall be carried out in the vicinity of the crusher. The Stack emission monitoring of the Crusher shall be carried out at periodic intervals.
- xiv. The budget of Rs. 1865.582 Lakhs to address the concerns raised by the public in the public consultation to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
- xv. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.
- xvi. The Project Proponent should adopt the proper mitigation measures as proposed under EMP with budgetary provision of Rs 44.77 Cr. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to the Ministry's Regional Office.

- xvii. The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any noncompliance or infringement should be reported to the concerned authority.
- xviii. The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.
- xix. NoC from the Central Ground Water Authority (CGWA)/ Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities, State Pollution Control Board / Pollution Control Committees shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission.
- xx. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment.
- xxi. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
- xxii. The Project Proponent needs to strictly adhere to the recommendations of Carrying Capacity Study for Environmentally Sustainable Iron Ore Mining Activities in Keonjhar, Sundargarh and Mayurbhanj Districts of Odisha State.

2.4 Amendment in EC dated 03.02.2009 w.r.t specific condition no: xx of Gandhamardan Block B Iron Ore Mining Project of M/s Odisha Mining Corporation Limited for production capacity of 9.12 MTPA in the mine lease area of 1590.8673 ha, located at Village: Upper Jagar, Urumunda, UparKainsari, Nitigotha, Ambadahara, Salarapentha, Daonla&Gandhamardan Protected Reserve Forest, Tehsil Banspal, Dist. Keonjhar, Odisha – [F.No:J-

11015/1084/2007-IA.II(M); Proposal No: IA/OR/MIN/451209/2023] – Amendment in EC

The instant proposal is for amendment in EC dated 03.02.2009 w.r.t specific condition no: xx of Gandhamardan Block B Iron Ore Mining Project of M/s Odisha Mining Corporation Limited for production capacity of 9.12 MTPA in the mine lease area of 1590.8673 ha, located at Village: Upper Jagar, Urumunda, UparKainsari, Nitigotha, Ambadahara, Salarapentha, Daonla & Gandhamardan Protected Reserve Forest, Tehsil Banspal, Dist. Keonjhar, Odisha.

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

- i. Initially, the Project Proponent obtained Environmental Clearance vide EC letter dated 03.02.2009 for an annual production capacity of 91,20,000 tonnes (9.12 million tonnes) of Iron Ore over an area of 1590.8673 ha. One of the specific condition no: xx states that *“Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral within the mine lease. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral within the mine lease shall not be overloaded. **No transportation of ore outside the mine lease area shall be carried out after the sunset”**.*
- ii. Now, the Project Proponent has requested for amendment in EC dated 03.02.2009 to allow the transportation of ore outside the mine lease area after the sunset in respect of Gandhamardan Block B Iron ore mines of OMC.
- iii. Justification for amendment in EC:
 - a) The Project Proponent has submitted that the total mine lease area is 1590.8673 ha, out of which 1409.6489 ha is a forest land and 181.2184 ha is a non-forest land.
 - b) Stage-II Forest Clearance was granted in two phases. (i) MoE&F vide letter dated 17.08.2007 granted forest clearance under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 232.438 ha of forest land and (ii) MoEF&CC vide letter dated 09.10.2018 granted forest clearance under Section-2 of the Forest (Conservation) Act, 1980 for diversion of balance forest land of 1177.211 ha including 25.1070 ha for safety zone in addition to 232.438 of forest land already diverted within total mining lease area of 1590.8673 ha.
 - c) Since the date of grant of forest clearance for the total area within mine lease, OMC has never been able to achieve the target production and dispatched Iron ore of 9.12MTPA (approved production quantity as per EC). It is not possible to transport all the materials during the day time with the existing road infrastructure and due to Specific Condition No.(xx) of EC dated 03.02.2009.

- iv. The Project Proponent has submitted that the supplementary mine lease deed executed on 07.06.2019 and the mine lease is valid up to 10.07.2040. Modification of Review of Mining Plan along with Progressive Mine Closure Plan was approved by Indian Bureau of Mines vide letter dated 02.08.2021 over an area of 1590.8673 ha for the period 2021-22 to 2024-25.
- v. The Project Proponent has submitted the past production details from the year 1993-94 to 2023-24 (August, 2023) as given below in table.

Year of Production	EC sanctioned capacity (t)	Actual Production (t)	Excess Production beyond the EC sanctioned capacity
1993-94	-	63109	-
1994-95	-	92165	-
1995-96	-	75798	-
1996-97	-	103788	-
1997-98	-	121000	-
1998-99	-	126516	-
1999-00	-	103936	-
2000-01	63108.83	61704	0
2001-02	63108.83	131384	68275.17
2002-03	63108.83	274053	210944.17
2003-04	63108.83	427954	364845.17
2004-05	63108.83	506613	443504.17
2005-06	63108.83	277358	214249.412
2006-07	63108.83	177851	114742.17
2007-08	63108.83	506235	443126.17
2008-09	1520000	3038626	1518626
2009-10	9120000	3271066	0
2010-11	9120000	3149986	0
2011-12	9120000	672505.29	0
2012-13	9120000	205326.844	0
2013-14	9120000	264748.13	0
2014-15	9120000	355675.2	0
2015-16	9120000	566947.79	0
2016-17	9120000	1301100	0
2017-18	9120000	2520000	0
2018-19	9120000	5058800	0
2019-20	9120000	6827400	0
2020-21	9120000	6424900	0
2021-22	9120000	7278000	0
2022-23	9120000	7034000	0
2023-24 (Aug, 2023)	9120000	1601700	0

- vi. The Project Proponent has submitted the certified compliance report issued by the Regional Office (RO), Bhubaneshwar. Site visit was conducted by RO on 09.10.2023.

3. Observation and Recommendation of the EAC:-

The Project Proponent informed the EAC that initially Environmental Clearance (EC) was obtained on 03.02.2009 for an annual production capacity of 91,20,000 tonnes (9.12 million tonnes) of Iron Ore over an area of 1590.8673 ha. The EAC asked the Project Proponent to show the certified past production details issued from the Office of the Deputy Director of Mines dated 18.09.2023 from the year 1993-94 to 2023-24 (Aug, 2023). The Project Proponent informed the EAC that there was no excess production was done after the grant of EC dated 03.02.2009. A Demand notice was issued from the Office of the Deputy Director of Mines in pursuant to the Hon'ble Supreme Court order dated 02.08.2017 and accordingly demand of about Rs 320 Cr was paid. The EAC asked the Project Proponent to submit the copies of the same to the Ministry.

The Project Proponent informed the EAC that one of the specific condition no: xx states that *“Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral within the mine lease. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral within the mine lease shall not be overloaded. No transportation of ore outside the mine lease area shall be carried out after the sunset”*. The restriction in mineral transportation beyond sunset leads to shortfall in supply of mineral to the potential buyers. The Project Proponent presented the data about Odisha's contribution to the India's Steel production and Iron Ore production. The Project Proponent informed the EAC that Odisha's contribution increased from 49.32% (FY 21) to 56.30% (FY 23). The EAC asked the Project Proponent about the State Govt. efforts to augment the road transportation. The Project Proponent informed the EAC that the Govt. of Odisha allotted the work to M/s Odisha Mining Corporation Ltd for infrastructure and logistics development. OMC on behalf of the Govt. of Odisha has engaged the KPMG to prepare the feasibility report and KPMG submitted the draft report to the Govt. of Odisha. Now, based on the draft feasibility report, OMC has engaged Grant Thornton Bharat to prepare detailed feasibility report with actionable points in which all the District Administrations are involved and is under process. The EAC was of the view that when the Govt. of Odisha was so serious to improve the road and infrastructure network why there is a need for night transportation. The Project Proponent informed the EAC it will take much time and that's why night transportation is mandatory.

The Project Proponent showed the ore transportation route and proposed mechanical evacuation system. The Project Proponent also showed the photographs of the road within the mine lease area. Further, the Project Proponent informed the EAC that fluorescent road signs provided at every turning point for guidance of drivers. Traffic supervisor will be deployed for night checking. Adequate numbers of single armed illumination pole will be installed with proper light shielding arrangement. The EAC asked the Project Proponent to present the certified

compliance report. The EAC noted that there are certain non-compliances w.r.t improper collection arrangement of runoff water, details of sump capacity, water sprinkling, quality of discharge water etc., The Project Proponent informed the EAC that the action taken report for the non-compliances has been submitted to the Regional Office. The EAC noted that the Project Proponent has revised and updated the details of the non-compliances after the site visit by the Regional Office on 09.10.2023.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the Project Proponent did not carry out any specific study w.r.t impact during night transportation. The EAC asked the Project Proponent to submit the specific mitigation measures w.r.t Wildlife during night transportation. The EAC also asked the Project Proponent to submit the letter from the State Forest Dept., regarding the movement of animals in the transportation route during night. Further, the EAC asked the Project Proponent to carry out the scientific study by the reputed institute regarding the carrying capacity of the road indicating the exact quantity to be transported during night time along with details of trips to and fro and the capacity of the dumper, design of the road, additional traffic on the road, timeframe required for night transportation depending on the infrastructure availability and also adverse impacts on the environment and wildlife due to night transportation. The EAC opined that the Project Proponent needs to submit the re verification report done by the Regional Office for the non-compliances. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to carry out the scientific study by the reputed institute regarding the carrying capacity of the road indicating the exact quantity to be transported during night time along with details of trips to and fro, capacity of the dumper, design of the road, additional traffic on the road, timeframe required for night transportation depending on the infrastructure availability and also adverse impacts on the environment and wildlife due to night transportation.
- ii. The Project Proponent needs to submit the specific mitigation measures w.r.t Wildlife during night transportation.
- iii. The Project Proponent needs to submit the letter from the State Forest Dept., regarding the movement of animals in the transportation route during night.
- iv. The Project Proponent needs to submit the re verification report done by the Regional Office for the non-compliances.
- v. The Project Proponent needs to submit the copy of the demand notice issued from the Office of the Deputy Director of Mines and proof of payment made against the demand notice.

- vi. The Project Proponent needs to submit the copy of the certified past production details issued from the Office of the Deputy Director of Mines dated 18.09.2023 from the year 1993-94 to 2023-24 (Aug, 2023).

Day 3: 7th December, 2023 (Thursday)

3.1 Budhwada Limestone Mine of M/s The Ramco Cements Limited for enhancement in production capacity of Limestone from 1.1 MTPA to 2.5 MTPA in the mine lease area of 160.0 ha, located at Village Budawada, Jaggayyapeta Taluk, NTR (Earlier Krishna) District, Andhra Pradesh – [F.No: J-11015/443/2014-IA.II(M); Proposal No: IA/AP/MIN/25556/2014; EIA Consultant: B.S. Envi – Tech Pvt. Ltd] – EC (Expansion)

The instant proposal is for mining of Limestone in Budhwada Limestone Mine of M/s The Ramco Cements Limited for enhancement in production capacity of Limestone from 1.1 MTPA to 2.5 MTPA in the mine lease area of 160.0 ha, located at Village Budawada, Jaggayyapeta Taluk, NTR (Earlier Krishna) District, Andhra Pradesh.

2. The details of the project as ascertained from the documents submitted by the Project Proponent are given as under:

- i. The proposed project activity is listed at Schedule no. 1(a) Mining of Minerals. The instant proposal attracts the general conditions as the Interstate Boundary of Andhra Pradesh – Telangana is located at a distance of 1.5km, W from the mine lease area and hence appraised at the Central level.
- ii. The mine lease area is located between Latitude 16°51'17.0" N to 16°52'10.30" N and longitude 80°03'46.9" E to 80°05'31.7" E. The mine lease area falls under the Survey of India Toposheet No 65/D/1.
- iii. Details of previous Environmental Clearance (EC):
 - a) Initially the Project Proponent obtained Environmental Clearance (EC) vide EC letter dated 10.02.2009 for Budhwada Limestone Mine for production capacity of 1.10 MTPA over an area of 160 ha in favour of M/s Madras Cements Ltd.
 - b) Then, the PP obtained Transfer of Environmental Clearance on 28.04.2023 from M/s Madras Cement Ltd to M/s The Ramco Cements Limited.
 - c) Subsequently, the Project Proponent obtained amendment in EC dated 10.02.2009 on 07.08.2023 w.r.t establishing Railway siding facility with stacker & reclaimer facility within the Mining lease area and to permit transportation of limestone from mine to the cement plant by road as well as by railway line for Budhwada Limestone Mine (ML area 160 Ha and production capacity 1.10 MTPA).
- iv. Details of Terms of Reference:
 - a) The Project Proponent obtained Terms of Reference (ToR) vide ToR letter dated 29.07.2015 for Budhwada Limestone Mine of M/s The Ramco Cements

Limited for enhancement in production capacity of Limestone from 1.1 MTPA to 2.5 MTPA in the mine lease area of 160.0 ha for undertaking detailed EIA/EMP study.

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

Based on observation of EAC in its EAC meeting held during October 23-24, 2017 and compliance of observation of EAC are detailed below:

S. No	Observation of EAC in its meeting held during October 23-24, 2017	Reply by the Project Proponent																
1	Only 10% of the production has been achieved and proposal for expansion could not be justified by the PP	<p>The Project Proponent has submitted that maximum production of 4,66,400 Metric Tonnes was achieved against the production capacity of 1.1 MTPA. The Project Proponent also submitted the certified production and despatch from the Dept. of Mines and Geology vide Lr.No. 436/M/2001 dated 24.05.2023 for the year 2009-10 to 2022-23.</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Year</th> <th>Production/ Dispatch in MT</th> <th>EC Capacity, MTPA</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2009-10</td> <td>0</td> <td>1.10</td> </tr> <tr> <td>2</td> <td>2010-11</td> <td>0</td> <td>1.10</td> </tr> <tr> <td>3</td> <td>2011-12</td> <td>0</td> <td>1.10</td> </tr> </tbody> </table>	S. No	Year	Production/ Dispatch in MT	EC Capacity, MTPA	1	2009-10	0	1.10	2	2010-11	0	1.10	3	2011-12	0	1.10
S. No	Year	Production/ Dispatch in MT	EC Capacity, MTPA															
1	2009-10	0	1.10															
2	2010-11	0	1.10															
3	2011-12	0	1.10															

		4	2012-13	0	1.10
		5	2013-14	0	1.10
		6	2014-15	1,000	1.10
		7	2015-16	4,333	1.10
		8	2016-17	1,000	1.10
		9	2017-18	240	1.10
		10	2018-19	97,140	1.10
		11	2019-20	85,200	1.10
		12	2020-21	4,000	1.10
		13	2021-22	3,23,863	1.10
		14	2022-23	4,66,400	1.10
2	The Committee also observed that the PP did not develop the green belt around the Mining lease, which is one of the conditions of the earlier EC.	The Project Proponent has submitted that Greenbelt is developed over an area of 3.5 ha (up to September 2023) with 9,900 plants all along the boundary of the mining lease. The Project Proponent also submitted the photographs showing the existing plantation.			
3	PP also submitted that they are in process of resolving the issue pertaining to approach road.	The Project Proponent submitted that amendment in EC dated 10.02.2009 was obtained on 07.08.2023 w.r.t establishing Railway siding facility with stacker & reclaimer facility within the Mining lease area and to permit transportation of limestone from mine to the cement plant by road as well as by railway line.			

3. Observation and Recommendation of the EAC:-

The Project Proponent briefed about the background of the project and informed the EAC that the proposal was earlier considered in the EAC meeting held during October 23-24, 2017 wherein the EAC was of the view that only 10% of the production has been achieved and proposal for expansion could not be justified by the PP. The Committee also observed that the PP did not develop the green belt around the Mining lease, which is one of the conditions of the earlier EC. PP submitted that they could not develop the green belt and achieve their rated production as they did not get permission from the other nearby mining lease owners to use the area under their control to approach their mining lease and due to this the production is less. PP also submitted that they are in process of resolving the issue pertaining to approach road. Therefore, the Committee decided to defer the proposal and instructed the PP to take steps to fulfill the conditions stipulated in earlier EC and resolve the issues pertaining to approach road. Complying to the above conditions, the proposal has been submitted for reconsideration of Environmental Clearance (EC).

The EAC asked the Project Proponent to present the KML file and to explain the site features. The Project Proponent presented the KML file and showed the boundary of the mine lease area and proposed transportation route by road. Due to dispute in land for transportation in part of the road, longer alternative route was taken to transport the mineral by District road. Status Quo is maintained in RINL land. The Project Proponent also informed the EAC that amendment in EC dated 10.02.2009 was obtained on 07.08.2023 w.r.t establishing Railway siding facility with stacker & reclaimer facility within the Mining lease area and to permit transportation of limestone from mine to the cement plant by road as well as by railway line for Budhwada Limestone Mine. More than 90% of railway siding facility work has been completed and once the railway siding starts functioning, mineral transport by road will be stopped. Further, the Project Proponent informed the EAC that the Railways have also issued the commissioning certificate and the railway siding is expected to be function by end of Dec, 2023.

Then, the Project Proponent presented the additional details sought by the EAC in its meeting held during September 19-20, 2016 and October 23-24, 2017. The Project Proponent presented the details of the certified production and despatch from the Dept. of Mines and Geology vide letter dated 24.05.2023 for the year 2009-10 to 2022-23. Maximum production of 4,66,400 Metric Tonnes was achieved against the production capacity of 1.1 MTPA during the FY 2022-23. Further, the Project Proponent informed the EAC that in current FY 2023-24, production of more than 5,00,000 Metric Tonnes was achieved. The EAC asked the Project Proponent to submit the proof for the same. The Project Proponent informed the EAC that an area of 3.5 ha (up to September 2023) with 9,900 plants have developed all along the boundary of the mining lease. The Project Proponent also presented the photographs showing the existing plantation. The Project Proponent also informed the EAC that the issue pertaining to approach road was resolved and amendment in EC dated 10.02.2009 was obtained on 07.08.2023 w.r.t establishing Railway siding facility with stacker & reclaimer facility within the Mining lease area and to permit transportation of limestone from mine to the cement plant by road as well as by railway line.

The Project Proponent informed the EAC that the list of flora and fauna was authenticated from the O/o of the District Forest Officer vide letter dated 20.06.2023 stating that there are no Schedule-I species in core/buffer zone of 10 kms radius of Ramco Budawada Limestone mine. The EAC noted that in certified compliance report dated 06.11.2023 it has been directed that the Project Proponent required to submit the wild life conservation plan at the earliest to Ministry and this Office. The Project Proponent informed the EAC that there are four Schedule-I species in the study area and accordingly Wildlife Conservation Plan was submitted to the Chief Wildlife Warden. The EAC opined that the Project Proponent needs to submit the revised list of authenticated flora and fauna in reference to the Wild Life (Protection) Amendment Act, 2022 and shall submit the proof of the submission of application of Wildlife Conservation Plan made to the Chief Wildlife Warden. The Project

Proponent informed the EAC a budget of Rs 75.0 Lakhs has been earmarked towards Wildlife Conservation Plan. The EAC asked the Project Proponent whether any revalidation of baseline was carried out or not. The Project Proponent informed the EAC that revalidation of baseline data was carried out during the year 2017. The EAC asked the Project Proponent to revalidate the baseline data for one month considering the expansion scenario.

The EAC asked the Project Proponent to submit the latest complete approved mining plan in Parivesh portal. The Project Proponent informed the EAC that the public hearing was carried out 26.04.2016. The EAC asked the Project Proponent to submit the action plan to address the concerns raised during public hearing over a period of 3 years and status of implementation if any. The EAC asked the Project Proponent to submit the NoC obtained for abstraction of Groundwater. The EAC asked the Project Proponent to verify from the Decision Support System (DSS) available from the National Tiger Conservation Authority (NTCA) website clarifying that whether instant mine lease area is a part of the tiger corridor and whether the transportation route passing through the tiger dispersal route. After detailed deliberations made by the Project Proponent and the Consultant, the EAC noted that the Project Proponent did not present the technical presentation as per the current scenario. Most of the information and data presented were related to the year 2017. The EAC asked the Project Proponent to revise the information and data in the technical presentation as per the current scenario. Based on the discussions held, the EAC **deferred** the proposal for want of following additional information:-

- i. The Project Proponent needs to revise the information and data in the technical presentation as per the current scenario.
- ii. The Project Proponent needs to revalidate the baseline data for one month considering the expansion scenario and submit the comparison of both old and new data.
- iii. The Project Proponent needs to submit the authenticated proof for achieved production of more than 5,00,000 Metric Tonnes in the FY 2023-24.
- iv. The Project Proponent needs to verify from the Decision Support System (DSS) available from the National Tiger Conservation Authority (NTCA) website clarifying that whether instant mine lease area is a part of the tiger corridor and whether the transportation route passing through the tiger dispersal route.
- v. The Project Proponent needs to submit the revised list of authenticated flora and fauna in reference to the Wild Life (Protection) Amendment Act, 2022 and shall submit the proof of the submission of application of Wildlife Conservation Plan made to the Chief Wildlife Warden along with the activities proposed under Wildlife Conservation Plan.

- vi. The Project Proponent needs to submit the layout of crusher and the preventive measures taken for noise control and dust suppression.
- vii. The Project Proponent to submit the action plan to address the concerns raised during public hearing over a period of 3 years and status of implementation if any.
- viii. The Project Proponent needs to submit the breakup of the project cost of Rs 4.0 Cr.
- ix. The Project Proponent needs to submit the latest complete approved mining plan in Parivesh portal.
- x. The Project Proponent needs to submit the closure report issued by the Sub-Office for the partially complied conditions.
- xi. The Project Proponent needs to submit the copy of NoC obtained for abstraction of Groundwater.

3.2 Sitapuram Limestone (ML-2) of M/s Zuari Cement Ltd for mining of Limestone with production capacity of 3,03,750 TPA of Limestone in the mine lease area of 558.71ha, located at Villages of Dondapadu&Revuru, Chintalapalem Mandal, Suryapet District, Telangana - [F.No: J-11015/174/2005-IA.II(M), Proposal No: IA/TG/MIN/255765/2022] - Reconsideration of Terms of Reference (ToR)

The instant proposal is for reconsideration of Terms of Reference for mining of Limestone in Sitapuram Limestone (ML-2) with production capacity of 3,03,750 TPA of Limestone in the mine lease area of 558.71ha, located at Villages of Dondapadu&Revuru, Chintalapalem Mandal, Suryapet District, Telangana.

2. Observation and Recommendation of the EAC:-

The EAC noted that the proposal was earlier considered in the 6thEAC (Non-Coal Mining) meeting held during 9-11 November, 2022 and the Project Proponent vide email dated 27.10.2022 informed the Ministry that the authorisation process of the nominated owner is not completed yet due to personal difficulties and hence requested to adjourn the meeting. Therefore, the EAC deferred the proposal based on the request of the Project Proponent vide email dated 27.10.2022. Again, the Project Proponent vide letter dated 10.02.2023, 01.05.2023, 07.08.2023 and 20.11.2023 informed the Ministry stating that the authority & responsible of top management is not decided yet due to retirement of Managing Director.

However an opportunity was given to the Project Proponent to attend the EAC meeting and accordingly the proposal was considered in the 23rd EAC (Non-Coal

Mining) meeting held during 5-7 December, 2023. But, the Project Proponent vide email dated 24.11.2023 requested to adjourn the meeting to the next date and informed that the Managing Director was recently retired and due to which Consultant as well as the Nominated Owner has not yet been authorized as there is a change in the Company policy. Based on the request of the Project Proponent email dated 24.11.2023, the EAC **deferred** the proposal.

3.3 Bajri (Minor Mineral with production capacity of 3.64 million TPA ROM) Mining by M/s Chandak Associates located at Village (s) Kurasia, BanediaCharnan, Kawrawas, Chandpura, Saigyawas, Golahera, Ralawata, Thatha, Setiwas, Jethaliya, Jharkiya (Radhavallabhpora), MorBhatiyani, Morda, Modiyala, Chaan, Barwas and Chuli., Tehsil- Todaraisingh, DistrictTonk, Rajasthan (1260.96ha). [F.No. J-11015/180/2013-IA.II(M); Proposal No. IA/RJ/MIN/19962/2013; EIA Consultant – M/s Enkay Enviro Services Pvt. Ltd] – Environmental Clearance (EC)

The instant proposal is for mining of Bajri (Minor Mineral with production capacity of 3.64 million TPA ROM) in the mine lease area of 1260.96ha, located at Village (s) Kurasia, BanediaCharnan, Kawrawas, Chandpura, Saigyawas, Golahera, Ralawata, Thatha, Setiwas, Jethaliya, Jharkiya (Radhavallabhpora), MorBhatiyani, Morda, Modiyala, Chaan, Barwas and Chuli., Tehsil- Todaraisingh, District Tonk, Rajasthan by M/s Chandak Associates.

2. Observation and Recommendation of the EAC: -

The EAC noted the Project Proponent's letter dated 03.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

3.4 Mining of River Sand Bajri (Minor mineral) in Banganga River with proposed production capacity of 15.0 Lakh TPA (ROM) by M/s Satyaswaroop Singh Jadon, located at 68 revenue villages of Tehsil- Mahwa, District – Dausa, Rajasthan – [F.No: J-11015/378/2013-IA-II(M), Proposal No: IA/RJ/MIN/20340/2013] - Environmental Clearance (EC)

The proposal of M/s Satyaswaroop Singh Jadon is for mining of Bajri (Minor Mineral) with proposed production capacity of 15.0 Lakh TPA (ROM). The mining lease area is located at 68 revenue villages of Tehsil- Mahwa, District – Dausa, Rajasthan in the mine lease area of 755.02ha. The mining lease area lies on Banganga River.

2. Observation and Recommendation of the EAC:-

The EAC noted the Project Proponent's letter dated 14.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

3.5 Mining of Bajri (Minor Mineral) with production capacity of 5,60,000 TPA (ROM) in the mine lease area of 113.77 Ha, located at Revenue Village (s) of

Tehsil Shahpura, District Jaipur, Rajasthan by Lessee Shri Arjun Singh – [F.No: J-11015/353/2013-IA.II(M), Proposal No: IA/RJ/MIN/51896/2013] - Environmental Clearance (EC)

The instant proposal is for mining of Bajri (Minor Mineral) with production capacity of 5,60,000 TPA (ROM) in the mine lease area of 113.77 Ha, located at Revenue Village (s) of Tehsil Shahpura, District Jaipur, Rajasthan by Lessee Shri Arjun Singh.

2. Observation and Recommendation of the EAC:-

The EAC noted the Project Proponent's letter dated 14.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

3.6 River Sand Mining with Production Capacity of 14 Lakh TPA in the mine lease area of 1329.983 Ha located near 86 Revenue villages viz. Mandwara, Shriramganj, Nareda, Chhapri and others., Tehsil Phagi, District Jaipur Rajasthan by M/s Mahendra Singh Ratnawat - [File No. J-11015/253/2013-IA.II (M); Proposal No. IA/RJ/MIN/53484/2013] - Environmental clearance

The instant proposal is for mining of River Sand with Production Capacity of 14 Lakh TPA in the mine lease area of 1329.983 Ha located near 86 Revenue villages viz. Mandwara, Shriramganj, Nareda, Chhapri and others., Tehsil Phagi, District Jaipur Rajasthan by M/s Mahendra Singh Ratnawat.

2. Observation and Recommendation of the EAC:-

The EAC noted the Project Proponent's letter dated 14.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

3.7 River Sand (Bajri) Mining Project with production capacity of 16,50,000 TPA in the Mine Lease Area of 4365.64 Ha located at Villages (Agewa, AnandpurKalu-I, AnandpurKalull, Asarlai, Odawas, etc., Tehsil Jaitaran, District Pali, Rajasthan of M/s Neetu Singh – [F.No. J-11015/03/2017-IA.II(M); Proposal No. IA/RJ/MIN/117185/ 2017] – Environmental Clearance

The instant proposal is for mining of River Sand (Bajri) Mining Project with production capacity of 16,50,000 TPA in the Mine Lease Area of 4365.64 Ha located at Villages (Agewa, AnandpurKalu-I, AnandpurKalull, Asarlai, Odawas, etc., Tehsil Jaitaran, District Pali, Rajasthan of M/s Neetu Singh.

2. Observation and Recommendation of the EAC:-

The EAC noted the Project Proponent's letter dated 14.11.2023 regarding the change in scope of the proposal. Accordingly, the EAC recommended to **return the proposal** in present form.

List of members of Expert Appraisal Committee participated through VC

S.No	Member Name	Member Address	Designation	5 th Dec., 2023	6 th Dec., 2023	7 th Dec., 2023
1	Dr. Dinesh Misra, IFS (Retd.)	Plot No 65, Sector 8, Gandhinagar, Gujarat, 382 008	Chairman	Yes	Yes	Yes
2	Sh. Niranjana Kumar Vasu, IFS (Retd.)	816, Shanti Nagar, Opposite Durgapur Railway Station, Jaipur-Rajasthan, 302018	Member	Yes	Yes	Yes
3	Dr. Asha Rajvanshi, Scientist 'G' (Retd.), WII	B/104/106 Rock Valley Apartments, GMS Road, Sewla Kalan, P.O. Majra, Dehradun, Uttarakhand-248171.	Member	Yes	Yes	Yes
4	Shri. Avijit Ghosh (CMD- Heavy Engineering Corporation Limited) (Retd.)	Singhee Marg, A- 604 Shahadeo Tower, P.P.Compound, Ranchi 834001, Jharkhand	Member	Yes	Yes	Yes
5	Shri. Bandi Ramchandra Reddy (Former CMD-South Eastern Coalfields Limited)-(Retd.)	Flat No-503 A, Jyoti Cosmos, White Fields, Hi-Tech City, Kondapur, Hyderabad-500081	Member	Yes	No	No
6	Prof. Pramod Kumar, Professor, Shri Aurobindo College, University of Delhi	Shri Aurobindo College, University of Delhi 1372, B-1, Vasant Kunj, New Delhi-110070	Member	No	No	No
7	Prof. Devesh Walia, Department of Environmental Studies	Department of Environmental Studies, NEHU, Shillong-793022 Meghalaya	Member	No	No	No
8	Dr. Suresh Tiwari Scientist-F	Indian Institute of Tropical Meteorology, Pune, New Delhi Branch, Prof. Ram Nath Viji Marg Rajinder Nagar, New Delhi – 110060	Member	No	No	No
9	Dr. K.G Asha Manjari, Professor, University of Mysore	10/B, "SPARSHA", 2nd Main, 2 nd Cross, Bhogadi 1 st Stage, Mysore-570026, Karnataka	Member	Yes	Yes	Yes
10	Prof. Dev Dutt Sharma, Vice-Chancellor	Sardar Patel University, Mandi H.P. 175001	Member	No	No	No
11	Shri V. K. Soni,	Government of India,	Member	Yes	No	No

Minutes of 23rd EAC (Non-Coal Mining) meeting held during 5-7 December, 2023

	Representative of India Meteorological Department	Ministry of Earth Sciences, India Meteorological Department, Mausam Bhawan, Lodi Road, New Delhi – 110003				
12	Shri Yogesh Kale, Representative of Indian Bureau of Mines	Controller of Mines, IBM Block D, Second Floor, Indira Bhawan, Civil Lines, Nagpur - 440001	Member	Yes	Yes	Yes
13	Representative of Directorate General of Mines Safety	Directorate General of Mines Safety	Member	Yes	Yes	Yes
14	Shri K. Gowrappan	No. 6, Ganesh Avenue II Street, Shakti Nagar, Porur, Chennai, Tamil Nadu - 600116	Special Invitee	Yes	-	-
15	Shri Pankaj Verma	3 rd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Member Secretary	Yes	Yes	Yes
16	Dr. Saurabh Upadhyay	2 nd Floor, Vayu Block, Indira Paryawaran Bhawan, MoEF&CC, Jorbagh, New Delhi- 110003.	Scientist C	Yes	Yes	Yes