

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL  
COMMITTEE, ODISHA HELD ON 03<sup>RD</sup> AUGUST, 2022**

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The SEAC met on 03<sup>rd</sup> August, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

1. Sri B. P. Singh	-	Chairman
2. Dr. K. Murugesan	-	Secretary
3. Dr. D. Swain	-	Member
4. Prof. (Dr.) H.B. Sahu	-	Member
5. Sri J. K. Mahapatra	-	Member
6. Sri K. R. Acharya	-	Member
7. Prof. (Dr.) B.K. Satpathy	-	Member
8. Prof. (Dr.) P.K. Mohanty	-	Member
9. Dr. K.C.S Panigrahi	-	Member
10. Dr. Sailabala Padhi	-	Member

Draft proceeding of the meeting was finalized by the members through e-mail and also final proceeding of the meeting was confirmed by the members through e-mail. The agenda-wise proceedings and recommendations of the committee are detailed below.

**ITEM NO. 01**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR “DIAMOND CITY CUTTACK” RESIDENTIAL APARTMENT ALONG WITH COMMERCIAL BUILDING PROJECT LOCATED AT PLOT NO2340, 2340/3563, 2343, 2333/5410, 2343/5411, 2344, 2334/6142, 2346/5962, 2347, 2347/5956, 2348, 2248/5496, 2248/5497 OVER BUILT-UP AREA OF 54514.323 SQM LOCATED IN THE VILLAGE: PRATAPNAGARI, NUAGADA, DISTRICT: CUTTACK OF M/S. EASTERN ESTATE CONSTRUCTION AND DEVELOPERS PVT. LTD OF SRI SANJEEV KUMAR - EC**

1. The proposal is for “Diamond City Cuttack” Residential Apartment along with Commercial Building Project Located at Plot No2340, 2340/3563, 2343, 2333/5410, 2343/5411, 2344, 2334/6142, 2346/5962, 2347, 2347/5956, 2348, 2248/5496, 2248/5497 over built-up area of 54514.323 sqm located in the Village: Pratapnagari, Nuagada, District: Cuttack of M/s. Eastern Estate Construction and Developers Pvt. Ltd of Sri Sanjeev Kumar.
2. The project falls under category “B” or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Eastern Estate Construction & Developers Pvt. Ltd. for Residential Project “Diamond City, Cuttack” on plot area 10,039.85 m<sup>2</sup> /2.48 acres located at Village: Pratapnagari, Nuagada, District: Cuttack, Odisha and total built up area – 54,513.32 m<sup>2</sup>. A part of project was approved for the built-up area i.e. 16,161.56 sq.m vide letter PLN-BDP-420/15 and construction was started based on that, which was less than 20,000 sq.m. Now the planning has been revised and the estimated Built-up area is 54,513.32 sq.m (including all FAR, Non-FAR and other services), which is more than 20,000 sq.m area which attracts the EIA notification 2006 and its amendments thereof.

4. **Location and Connectivity** – The proposed site is located at Village: Pratapnagari, Nuagada, District: Cuttack, Odisha. The Geographical co-ordinate of the project site are Latitude: 20°23'31.26"N & Longitude: 85°53'9.06"E. The site is very near to AH 45 (NH 16 Bhubaneswar Road) is approx. 0.06 m in SW direction. Ring Road is approx. 1.92 km in ENE direction. The nearest railway station is New Bhubaneswar Railway Station approx. 5.337 km in West direction from the project site. Biju Patnaik International Airport is at a distance of approx. 17.284 km in SW direction from the project site. Chandka-Dampara Wild Life Sanctuary is about 6.9 km in NW direction. Nandankanan Wild Life Sanctuary is about 5.9 km in W direction.
5. The site is coming under Cuttack Municipal Corporation.
6. The plot area of the project site is 10039.85 m<sup>2</sup> (2.48 acres) and estimated built-up area of the project is 54514.323 m<sup>2</sup>. Total population of project is 2,425 persons (including Residents + Staff + Visitors).
7. The project facilities will develop 388 Dwelling Units which includes three blocks (2B+S+12), one block (B+S+8), Commercial (S+5) & Club House (2B+2) & other services and amenities.
8. The building details of the Project:

S. No.	Particulars	Details
i)	Total Plot Area (Acres)	2.48
ii)	Total Plot Area (Sq.m)	10039.85
iii)	Total FAR Area (Including Services)	40346.04
iv)	Achieved FAR	4.0
v)	Ground Coverage (Permissible) 40% (sq.m)	4015.94
vi)	Achieved Coverage (Permissible) 38.50% (sq.m)	3865.34
vii)	Non Far (Combined Stilt and Basement built-up area )	12168.261
viii)	Miscellaneous Area (Guard Room, STP, UGT etc.)	2000
ix)	<b>Total Built-up Area (3+8+9)</b>	<b>54514.323</b>
x)	Green belt Area (sqm) (20% of total plot area)	2007.97
xi)	Paved Open Green & Avenue Green area (sq.m) (13% of total plot area)	1305.18
xii)	Road and Open Area	1857.38
xiii)	No. of DU	388.0
xiv)	Total Project Cost (Land + Development Cost)	75 Crores
xv)	No. of DG sets for Backup (KVA)	1x62.5+2x400
xvi)	Total Power Requirement KVA	2300.0
xvii)	Maximum Height of Building (m)	46

9. **Water Requirement** – The total water requirement will be 280 KLD. The fresh water requirement will be approx. 180.5 KLD, which will be provided by Bhubaneswar Municipal Corporation. The project will generate approx. 235 KLD of wastewater. The wastewater will be treated in onsite STP of 280 KLD capacity. Treated wastewater will be re-used for flushing, landscaping, floor & car washing. Surplus treated effluent will be discharged to external sewer with permission.
10. **Total no. of Rainwater Harvesting pits** – 10 nos for the project.

11. **Power Requirement** - The total power requirement for the Residential Project is 2300 kVA, The Source of Power supply will be from (Odisha State Electricity Board). There will be provision of 3 no. of DG sets of total capacity 862.5 KVA (1×62.5+ 2×400 KVA each) for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

12. **Solid waste Management** - The solid waste generated from the project shall be approx. 591 kg per day. The solid waste will be collected then segregated at source. Adequate number of coloured bins (green, blue & dark grey) separate for biodegradable and non - biodegradable are proposed to be provided at the strategic locations within the site. STP sludge is proposed to be used for horticultural purpose as manure. Landscaping waste/ Biodegradable waste will be composted by Organic Waste Converter 100 sq.m area has been proposed for OWC. Spent oil from DG sets will be sold to CPCB authorised recyclers.

S. No.	Category	Kg per capita per day	Waste generated (kg/day)
i)	Residents	1940 @ 0.5 kg/day	<b>970</b>
ii)	Staff	107 @ 0.25 kg / day	<b>26.75</b>
iii)	Visitor	281 @ 0.15 kg /day	<b>42.6</b>
iv)	Landscape waste	0.8184 @ 0.2 kg/acres	<b>0.16</b>
<b>Total Solid Waste Generated</b>			<b>1039.35 kg/day</b>

Note: Sludge from STP: 14.68 Kg/day, which will be dried and used as Manure in landscaping.  
 (Sludge Calculations = (Inlet BOD- Outlet BOD) x WW x 0.25  
 (= (280 – 30) x 235 x 0.25 = 14.68 Kg/day)

13. **Green Belt** – Total Green area including paved green / open area measures 3312 m2 i.e. 33 % of the total area. In which peripheral green belt including external and internal periphery area is 2007.97 (20 % total area), Open Paved Green, Terrace Green and Vertical green area is 1003.985 (10 % total area) and Lawn Green Area 301.19 (3% of total area). Total no. of trees proposed = 132 Nos.

14. **Parking Details** – Total Parking Area Provided - 10694.10 Sq. Mt / 334 ECS.

15. **Rain Water harvested** through 10 nos. of Rain Water recharging pits.

16. **Firefighting Installations:** Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the provisions given in Part-IV of National Building Code of India -2016 and relevant BIS specifications.

17. The project cost is 75 crores and Environmental Monitoring Programme Cost – 241 lakhs, which is approx. 3 % of total project cost.

18. The project proponent along with the consultant **M/s OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd., Ghaziabad, U.P - 201012** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd., Ghaziabad, U.P – 201012** the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

- i) Structural Stability certificate from appropriate authority as per CDA guidelines be submitted and vetted from reputed institute with reference to approved original plan and the revised plan approved.
- ii) Separate two entry and exit gates to be made for residents and commercial.
- iii) Certificate from chartered civil engineer how much construction has been made. Construction status with reference to original plan and revised plan.
- iv) Comparative statement in terms of physical features in original plan and present plan.
- v) Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) and also for commercial complex the norm as well and showing it in the layout map & be submitted since provision of 356 ECS against 388 dwelling units proposed.
- vi) Detailed calculation of Rain Water Harvesting and Layout showing Rainwater Harvesting pits.
- vii) Layout map showing the treated water fallout to nearest drain and its distance.
- viii) Layout of internal drainage map and their fallout to external public drain.
- ix) Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.
- x) Reduce discharge of treated water to drain.
- xi) A detailed writeup with justification as to why this case will not be treated as violation case.
- xii) Traffic study be undertaken at intersecting points with NH from a reputed Institute or vetted by a reputed Institute be submitted.
- xiii) Impact/ effect of change in ground coverage due to revised plan and to be shown in the layout drawing with dimension.
- xiv) A comparative statement of original plan vis- a - vis the revised plan with super imposition of the revised one on the original one be submitted.
- xv) quality of underground water
- xvi) To explore whether Puri canal be source of domestic water since it is at 340 mtrs with provision of WTP.
- xvii) The PP to submit sabik RoR with kisam, Hal RoR with kissam for the project area to rule out the investment of Forest/DLC land.
- xviii) To submit the Fire Safety recommendation of the State Government Fire wing.
- xix) To submit the plan for Ventilation, lightning and air conditioning of lift from lowest basement floor to terrace floor.
- xx) Provision of solar power for the project.

## **ITEM NO. 02**

### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR EXPANSION WITH MODIFICATION OF “ARIANA”, MULTISTORIED RESIDENTIAL COMPLEX OVER AN BUILT UP AREA-58788.51 SQM AT MOUZA- SANKARPUR, BHUBANESWAR, ODISHA AT MOUZA- PATIA, OF BHUBANESWAR MUNICIPAL CORPORATION IN THE DEVELOPMENT PLAN AREA OF BHUBANESWAR DISTRICT KHORDA FOR M/S.KRIDAY REALTY PRIVATE LIMITED OF SRI SIDDHARTHA ROY – EC**

1. The proposal is for Expansion with Modification of “ARIANA”, Multistoried Residential complex over an built up area-58788.51 sqm at Mouza- Sankarpur, Bhubaneswar, Odisha at Mouza- Patia, of Bhubaneswar Municipal Corporation in the Development plan area of Bhubaneswar District Khorda for M/s.Kriday Realty Private Limited of Sri Siddhartha Roy.
2. The project falls under category “B” or activity 8 (a)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Kriday Realty Private Limited has proposed for expansion with modification of Residential Project “TATA ARIANA” located at Mouza - Sankarpur , Bhubaneswar in the district of Khurda in Odisha.
4. The project has been granted prior environmental clearance vide letter no - 1997/SEIAA on dated 24th April 2013 for construction of 12 Towers having total construction area of 1,85,176.33 m2 (including Basement ) 132395.7 sqm (Excluding Basement area).
5. Later due to PPP agreement expired in the year 2017 & Extension of Time (EoT) received only in December’2021 from BDA building revised proposal for expansion and modification was submitted and recommended for the ToR .
6. Based on the same ToR was granted vide Letter No. SEIAA-File No- File No.76188/83-MIS/04-2022 dated 29.04.2022 for Expansion and Modification of Residential Project “ TATA ARIANA ” for total plot area of 12 Acres or 48575.31 sqm .
7. **Location and Connectivity** – The proposed site is located at Mouza- Sankarpur, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site are Latitude: 20°15'47.40"N & Longitude: 85°45'22.72"E. The site is very near to NH 5 is approx. 0.92km.The nearest railway station is Bhubaneswar Railway Station approx. 9.3 km from the project site. Biju Patnaik International Airport is at a distance of approx. 7km from the project site. Chandka-Dampara Wild Life Sanctuary is about 7.71km. Nandankanan Wild Life Sanctuary is about 14km.
8. The site is coming under Bhubaneswar Municipality area.
9. The residential population of the project will be 2392 persons after 100% completion. The population for the project is estimated at 2392 permanent, 316 visitors, and 1133 in retail, Club & Town admin building etc.
10. The Current Status of building Project:

<b>S. No.</b>	<b>Project Activity</b>	<b>Details</b>	<b>Work completed so far</b>	<b>Work Yet to be completed</b>
i)	Plot Area	Total Plot Area: 48575.31 sqm. (12.00 Acres/ 4.857531 Ha),		

S. No.	Project Activity	Details	Work completed so far	Work Yet to be completed
		In Possession-201537.49 sqm		
ii)	Ground coverage	9,977.279 (20.5%)	6918.703 (14.2%)	3058.576 (6.3%)
iii)	Road Area	8075.162		
iv)	Green belt (plantation area )	9997.585		
v)	Green belt above Podium	8195.295		
vi)	Service Area	515.522		
vii)	Swimming Pool	269.383		
viii)	open parking area	5800.365		
ix)	Proposed FAR	Permissible -2.75 Proposed – 2.749		
x)	Built Up Area	EC obtained for 12 Towers with built-up area of 1,85,176.33 m <sup>2</sup> (including Basement ) & 132395.7 sqm (Excluding Basement area)		
		The total built-up area after modification will be decreases from 1,85,176.33 m <sup>2</sup> (including Basement ) to 171593.75 m <sup>2</sup>	Existing-79458.56 sqm (Excluding Basement) 112805.24 sqm (Including Basement))	Proposed built up area- 58788.51 sqm
xi)	Landscape Area Total Green belt (plantation area ) 20.6 % Green belt above Podium 16.9 %	18192.88 sqm (37.5 %)	Green belt (plantation area 9997.585 sqm	
			Green belt above Podium 8195.295 sqm	
xii)	Parking Area 30 % percentage of total built-up area towards FAR	Total parking area - 41,685.917	Existing 8 Towers = 24377.318 Sqm (31% of Built up area )	Proposed 4 Towers & = 17308.599 Sqm (30% of Built up area )
xiii)	Maximum height of building	66 m	-(G+13, G+14 , G+15 & G+16) -51 m	Proposed – ( G+21) -66 m
xiv)	No. of Units	1210 nos.	792	418 Total no of L.I.G. Flats=244 nos (Which is more than 20% of total nos. of Flats)
xv)	Total project cost	` 557 Cr	` 346 Cr	` 211

**11. Water Requirement** – During Operation phase the total water requirement for proposed 4 towers is approx. 323 KLD (domestic + flushing ), out of which total domestic water requirement for residential is 215 KLD, flushing water is 108 KLD . The total fresh water requirement is 215 KLD (daily basis for residential blocks for domestic requirement).It is expected that the proposed additional 4 towers will be generate approx. 269 KLD (80 % of wastewater from residential and club area. The wastewater will be treated in a STP having capacity of 860 KL (provided for Existing and proposed sewage water Treatment ) provided within the complex generating 215 KLD of recoverable treated waste water from STP which

will be recycled within the project. During dry season there it will be follow zero discharge of surplus treated wastewater and 140 KLD will become surplus in monsoon season and will be discharged into municipal sewer. Sewerage treated water can be used in Toilet Flushing & Irrigation to reduce the load on fresh water.

Therefore, the total fresh water requirement is approx. 895 KLD ( Existing +Proposed+ visitor and retail area etc.), out of which total domestic water requirement for residential is 589 KLD, flushing water is 306 KLD . The total fresh water requirement is 589 KLD (daily basis for residential blocks for domestic requirement).

12. **Total no. of Rainwater Harvesting pits** – 08 nos for the project.
13. **Power Requirement** - The overall maximum demand is approximately 4384.49 kW or 6000kVA at power factor 0.9. It is proposed to have Grid supply at 33KV from Electricity Supply Company. It is proposed to have 100% Power Backup for Common Area Services and limited for each flat. The Back-up power shall be provided by 415 Volt DG Sets. Total Backup power load is 3530 KVA which will be met by 3 nos. 1010 kVA, 1 no. 500 KVA 415 DG sets. Solar Power proposed for 4 towers is 100KW.
14. **Solid waste Management** - During operation phase, waste comprise of municipal waste majorly. Total waste generation after overall development of the project is estimated to be 3381 kg/day. Waste will be segregated into recyclable, compostable and inert waste. Apart from this E-waste will be generated from the project site. Hazardous waste to be generated from site is used oil only from DG sets. Presently, total solid waste generation is about 1.196 T/day. However, it is envisaged to be 3.8 T/day after 100% completion and operation of the project. The Municipal Solid Waste Management will be conducted as per the guidelines of Solid Waste Management Rules, 2016.
15. **Green Belt** – The project has been well planned to have sufficient open space and green coverage. The green area comprises of evergreen, tall and ornamental trees and ornamental shrubs inside the premises. The green area has been developed over total green area measuring 18192.88 sqm (37.5 %) has already been developed. The biodiversity in the area will improve due to the proposed green cover. Evergreen tall and ornamental trees and ornamental shrubs will be planted inside the premises.
16. **Parking Details** – Total Parking Area Provided - 41,685.917Sq. (Existing 8 Towers = 24377.318 Sqm (31% of Built up area) & Proposed 4 Towers = 17308.599 Sqm (30% of Built up area ).
17. **Rain Water harvested** through 08 nos. of Rain Water recharging pits. .
18. **Fire fighting Installations:** Fire fighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the provisions given in Part-IV of National Building Code of India -2016 and relevant BIS specifications.
19. The project cost is 577 crores in total out of which for existing building is 327 crores and for proposed building is 250 crores. Environmental Monitoring Programme Cost Capital and recurring cost towards EMP will be Rs. 2058.75 lakhs and 429.9 lakhs/ annum respectively.
20. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

- i) Certificate from chartered civil engineer that no construction has been made in proposed four towers bearing number 5,6,7,8. Construction status of the original plan approved vis- a- vis the approved revised plan also.
- ii) Comparative matrix on relevant environmental parameters e.g. impact on STP, Green belt, Fire tender roads etc on expansion. Whether existing system can accommodate the proposed expansion?
- iii) Reduce discharge of treated water to drain by utilising in green belt plantation.
- iv) Detailed calculation on solar energy existing and proposed.
- v) Continuous greenbelt to be made. A detailed report and layout on green belt existing and proposed.
- vi) Comparative statement for all physical features between existing and proposed expansion.
- vii) Compliance Report to previous EC conditions duly certified by Regional Office, MoEF&CC, Bhubaneswar.
- viii) Structural stability from NIT/ IIT with endorsement from BDA as per the bye laws of the later with reference to original approved plan and revised approved plan in view of increase in number of floors and building height.
- ix) Traffic study undertaken as stated be vetted and submitted with decongestion plan as & if necessary.
- x) The PP to submit sabik RoR with kisam, Hal RoR with kissam for the project area to rule out the investment of Forest/DLC land.
- xi) To submit a Fire Safety Certificate for the operating towers and utilities and Fire Safety recommendation for the remaining construction.
- xii) To submit the plan for Ventilation, lightning and air conditioning of lift from lowest basement floor to terrace floor.
- xiii) Provision of solar power for the entire project with location of installation of photovoltaic frames and utilisation of solar power for the common area to be marked in the layout plan.
- xiv) To submit a bio-diversity register for the 12 acres project area as per the provision of biodiversity Conservation Act, 2003 along with a write up on the improvement in conservation of biodiversity during the year 2013 till now.
- xv) To submit the Energy Conservation efforts made in the project as per bureau of Energy efficiency under Energy Conservation Act, 2002.
- xvi) To submit the original NoC from CGWA VIS-A-VIS the actual consumption of water for the last 10years along with the permission letter and agreement with the State Government Water Resource Department.
- xvii) To submit the organogram for management of WTP, WWTP, STP, SWM, Hazardous Waste, Greenbelt, DG set emission, Vehicular emission, Safety of Lifts, Fire safety and other safety requirements of the project including Battery rules, DG rules, BMW rule in case of Dispensary/First aid center etc.



xviii) To submit the compliance of existing CTE & CTO duly certified by SPCB, Regional office, Bhubaneswar.

**ITEM NO. 03**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR EXPANSION OF IRON ORE BENEFICIATION PLANT FROM 10.7 MTPA (THROUGHPUT) CAPACITY TO 16.0 MTPA (THROUGHPUT), RELOCATION OF TAILING DAM AT VILLAGE - SANKARI, GRAM PANCHAYAT - PHULJHAR, DIST.-KEONJHAR, LAYING OF TAILING PIPELINE AND RETURN WATER PIPELINE FROM BENEFICIATION PLANT TO TAILING DAM AND LAYING OF WATER PIPELINE AND SLURRY PIPELINE FROM BENEFICIATION PLANT TO GHORABURHANI-SAGASAH I IRON ORE BLOCK FOR M/S. ARCELOR MITTAL NIPPON STEEL INDIA LIMITED OF SRI SUBRAHMANYA SHANBHOGUE TANTRADI - EC**

1. The proposal is for Environmental Clearance for Expansion of Iron Ore Beneficiation Plant from 10.7 MTPA (Throughput) Capacity to 16.0 MTPA (Throughput), Relocation of Tailing Dam at Village - Sankari, Gram Panchayat - Phuljhar, Dist.-Keonjhar, Laying of Tailing Pipeline and Return Water Pipeline from Beneficiation Plant to Tailing Dam and Laying of Water Pipeline and Slurry Pipeline from Beneficiation Plant to Ghoraburhani-Sagasahi Iron Ore Block for M/s. Arcelor Mittal Nippon Steel India Limited of Sri Subrahmanya Shanbhogue Tantradi.
2. The project falls under category “B” or activity 2 (b) - Mineral Beneficiation under EIA Notification dated 14th September 2006 as amended vide MoEF&CC, Govt. of India Notification No. S.O. 1886(E) Dated 20<sup>th</sup> April, 2022.
3. **Location and Connectivity:** The proposed project works will be carried out within the existing plant boundary of AM/NS INDIA existing plant, which is located in village Sankari, District – Keonjhar. The coordinates of Beneficiation plant are as follows: Latitude 21°51’30” N and Longitude 85°24’15” E. The existing 10.7 MTPA (Throughput) Beneficiation Plant has been established over an area of 79 + 6 acres (34.40 Ha). The truck unloading station has been set up over an area of 4.75 acres (1.92 Ha), adjacent to the Beneficiation plant, Dabuna. Additional land of 321.81 acres (130.23 Ha) at Sankari of Phuljhar Gram Panchayat has been identified for establishing a tailing dam. Slurry and water pipelines from Ghoraburhani-Sagasahi Iron Ore Mine to Beneficiation Plant at Dabuna will involve an area of 59.02 acres (23.886 Ha) of land. The tailing and return water pipelines from Tailing Dam to Beneficiation Plant will require 54.40 acres (22.019 Ha) of land details given in Table No. 2.1 The existing Beneficiation Plant is located on KIDCO expressway from Palaspanga to Kalimati Chakk and well connected with NH-215.
4. Part of the expansion project in the Beneficiation Plant will be accommodated within the existing plant boundary. The land for tailing disposal is located at a distance of 12 kms by road and 18.178 kms by pipeline route from the Beneficiation Plant, Dabuna.
5. Except the tailing dam area of 130.23 ha. which is under advanced possession, the remaining land has been acquired by AMNS India. The acquisition of the tailing dam area is in progress.
6. Stage – I Forest Diversion Clearance for “pipelines” has been obtained for the entire 29.194 ha Forest Land vide Letter No. 5-ORC496/2022-BHU, dated 25.01.2022 and Letter No. 5-ORC481/2021-BHU, dated 28.12.2021.

## 7. Chronology of the proposal is

Sr. No.	Clearance	Approval Status
i)	Environmental Clearance for the existing Iron ore Beneficiation plant of 10.7 MTPA throughout capacity.	EC granted by MoEF & CC vide letter no. J-11015/876/2007-IA.II (M) dated 04.05.2009
ii)	Amendment of EC	Letter No. J-11015/867/2007-IA.II (M) dated 22.05.2013
iii)	Submission of Form-1 & PFR for Expansion project	Submitted to MoEF & CC vide Online application no. IA/OR/IND/58662/2016 dated 29.08.2016
iv)	TOR for the expansion project.	TOR granted by MoEF & CC, vide letter no. J-11011/222/2016-IA.II (I), dated 20.07.2017.
v)	For amendment of TOR, Essar submitted Form-1 and Pre-Feasibility Report to MoEF & CC.	Online Submission vide Online Proposal No. IA/OR/IND/58662/2016 dated 28.10.2017
vi)	Presentation before EAC (Industry-1) for amendment of ToR	Amendment for TOR Presentation held on 13.12.2017
vii)	Amendment of ToR	Meeting held during 11-13 <sup>th</sup> Dec-2017 and subsequently the proposal was held up by MOEF & CC, GOI due to ongoing CIRP process.
viii)	Amendment in ToR	Amendment in ToR granted on 23 <sup>rd</sup> January 2020.
ix)	ToR Validity Extension	ToR validity extended upto 19.07.2021 vide Letter dated 22 <sup>nd</sup> October 2020
x)	Public Consultation	Completed on 12.04.2021
xi)	Name Change Application in Parivesh Portal from ESSAR Steel Limited to Arcelor Mittal Nippon Steel India Limited.	Applied on 08.07.2021
xii)	Conformation for Name Change Application received from MoEF&CC	Completed on 03.08.2021
xiii)	Submission of Form 2 for grant of Environmental Clearance	Applied on 18.07.2021
xiv)	EDS generated by MoEF&CC	19.07.2021
xv)	Delay in EDS compliance	Letter from DFO regarding clarification of land at Tailing Pond site has been received on 14.05.2022
xvi)	Application for EC as Category B project	As per MoEF&CC notification S.O. 1886 (E) dated 20.04.2022

## 8. The project configuration is

S. No.	Facilities	Capacity
Existing Project Configuration		
i)	Beneficiation Plant	10.7 MTPA (throughput) to produce 8.0 MTPA concentrate
ii)	Slurry Pipeline	12 MTPA
iii)	Tailings Pond (Not Installed)	87.01 Ha
Proposed Project Configuration		
iv)	Beneficiation Plant	16 MTPA (throughput) to produce 12.0 MTPA concentrate
v)	Slurry Pipeline (Ghoraburhani – Sagasahi Iron Ore Mines to Beneficiation Plant)	6 MTPA

Proceedings of the SEAC meeting held on 03.08.2022

Environmental Scientist, SEAC

vi)	Relocation of Tailings Dam from Basantpur village to Sankari Village	130.23 Ha
vii)	Underground Tailing and Return Water Pipeline and Electrical Cables with Beneficiation Plant	0 to 4 MTPA max

9. **Raw Material and source** - Iron Ore fines are being used as Raw material for the proposed Beneficiation plant. Iron Ore fines of average grade between 58% to 64 % Fe is used and the Iron Ore Concentrate which will be produced from the Beneficiation plant will be of average grade between 63.5% to 66% Fe. For the proposed expansion, 16 MTPA Iron Ore fines will be required as feed of the beneficiation plant. These Iron Ore Fines will be sourced from captive mines of the company i.e., Ghoraburhani - Sagasahi Iron Ore block at Koira - Tehsil in Sundergarh District and Thakurani Iron Ore mine in Keonjhar District along with different private merchant miners available in the surrounding area of Odisha. The list of mines from where IOF is expected to be sourced are given in Table below.

Sl. No.	Name of the Mine	Name of the Lessee	Distance (in km)	Quantity (MTPA)
i)	Ghoraburhani-Sagasahi Iron ore mines	AMNS India	28	6
ii)	Thaukarani Iron ore mines	AMIPL	50	4.8
iii)	Balda Block C, Unchabali Iron ore mines & other merchant mines	Serajuddin & Co., Indrani Patnaik and OMC	Between 7 - 40	5.2
<b>Total</b>				<b>16.0</b>

10. **Water Requirement** - In the Beneficiation Plant, the water will be used for process operation, dust suppression system, slurry, and tailings transportation, flushing, firewater and drinking purpose. Drinking water requirements will be met from the raw water after necessary treatment within the plant facility. The total water requirement of 11.77 cusecs (about 1200 m<sup>3</sup>/h) for the beneficiation plant is sourced from Baitarani River through a 9 km long water pipeline.

11. **Power Requirement** - The existing plant operation was closely observed, and overall present plant power consumption is estimated to be 22 MW and required power after expansion is 32 MW. Six nos. of 2.25 MVA generator shall be kept as backup.

12. **Green Area** - The existing green area is 8 ha. Additionally 4 ha. Green belt will be developed. In tailing pond area for green belt is 60.52ha. Total green area is 72.52ha.

13. **Manpower** - The existing manpower is 664 nos. Additionally 450 persons will get direct employment. The total direct employment after expansion will be 1094 nos.

14. **Project Cost** - Estimated project cost for expansion project is Rs.388.84 Crore. A sum of ` 16.35 Crores will be spent towards capital cost for EMP and a sum of ` 1.35 crores will be spent towards annual recurring cost of EMP.

15. The baseline data on micro- meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during December 2017 – February 2018 and December 2020 – February 2021. The observations are:

- Air Quality Monitoring done at 14 locations - PM2.5 = 56.16 to 24.12 µg/m<sup>3</sup>, PM10= 93.6 to 40.2 µg/m<sup>3</sup>, SO<sub>2</sub>= 23.6 to 4.1 µg/m<sup>3</sup>, NO<sub>2</sub> = 27.4 to 9.1 µg/m<sup>3</sup> and CO = 0.98 to 0.11 mg/m<sup>3</sup>.
  - Groundwater Quality Monitoring done at 9 locations - pH: 7.46 to 7.26, Total Hardness: 92 to 76 mg/l, Chlorides: 60 to 30 mg/l and Fluoride: 0.03 to 0.01 mg/l.
  - Surface Water quality Monitoring done at 12 locations - pH: 7.55 to 7.02, DO: 7.3 to 5.8 mg/l, BOD: 1.5 to 1.1 mg/l and COD: 9.1 to 4.4 mg/l.
  - Noise Levels Monitoring done at 11 locations - Night-time: 66.3 dB(A) to 34 dB(A) and Daytime: 72.4 dB(A) to 42.0 dB(A).
16. Public Hearing was conducted on 12.04.2021 at Village Sankari of Phuljhar Gram Panchayat, Keonjhar District. Issues are Integrated Development of the Area which includes Health, Education, and Model Village; including the construction of Roads Education facilities; Transportation; Pollution Control; Patta for Villagers; Compensation for Landholders
17. The Environment Consultant **M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Comparative statement of salient physical features and salient features with reference to environmental parameters of the existing mines and proposed expansion including water balance shall be submitted and detail of final non utilised ore and grade of it and its management.
- ii) Detailed plan for reduction/ to keep within limit the values of PM2.5 and PM10, since it is in borderline of permissible limit.
- iii) Provision of solar power at present and on proposed expansion against the corresponding total power demand.
- iv) Status of acquisition of private land 45ha. and R&R plan.
- v) Capacity of existing STP and on expansion with basis of calculation.
- vi) Design of Tailing pond and its capacity existing and proposed and its management.
- vii) Detailed plan to arrest siltation.
- viii) Details of domestic water usage.
- ix) Copies of compliance to all ADS by the MoEF&CC, Govt. of India and copies of minutes of all meetings of EAC of MoEF&CC, Govt. of India.

- x) Compliance to earlier EC conditions duly certified by the Regional Office, MoEF&CC, Bhubaneswar and Compliance to CTE & CTO conditions duly certified by the SPCB, Odisha.
- xi) Compliance of NEERI conditions with 3D pictures of essential physical features like parking plaza, permanent sprinkling arrangement in haulage road and inside the plant, regular air monitoring stations on haulage road etc.

#### **ITEM NO. 04**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR EXPANSION OF KALARANGIATTA CHROMITE MINE (ML AREA: 23.800 HA) FOR INCREASE IN PRODUCTION FROM 0.05 MTPA TO 0.15 MTPA CHROMITE ORE (ROM) WITH MAXIMUM EXCAVATION OF 0.438 MILLION CUM PER ANNUM THROUGH OPENCAST MINING AT VILLAGE KALARANGIATTA UNDER SUKINDA TEHSIL IN JAJPUR DISTRICT FOR M/S. FERRO ALLOYS CORPORATION LIMITED OF SRI SANDEEP KITTANA ACHARYA – EC.**

1. The proposal is for Environmental Clearance for Expansion of Kalarangiatta Chromite Mine (ML Area: 23.800 Ha) for increase in production from 0.05 MTPA to 0.15 MTPA Chromite Ore (ROM) with maximum excavation of 0.438 Million Cum per Annum through opencast mining at village Kalarangiatta under Sukinda Tehsil in Jajpur District for M/s. Ferro Alloys Corporation Limited of Sri Sandeep Kittana Acharya.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. The proposed project is for M/s Ferro Alloys Corporation Ltd. for expansion of Kalarangiatta Chromite mines for increase in production from 0.05 MTPA to 0.15 MTPA Chrome Ore (ROM) with maximum excavation of 0.438 Million cum per annum over an mining lease area: - 23.80Ha., at village – Kalarangiatta, Tahasil – Sukinda, Dist – Jajpur, Odisha.
4. Terms of Reference (ToR) was issued vide letter no - 3495/SEIAA on dated 18.11.2021.
5. Public Hearing was conducted on dated 17.05.2022 (at 11:00 A.M.) at village - Kalarangiatta under Sukinda tehsil of Jajpur district, Odisha. Major issues were environment protection, periphery development in the local area, local employment, organize quarterly medical camp in the area, water sprinkling and plantation activity in the local area etc.
6. **Site Location and Connectivity** - The Kalarangiatta Chromite Mine Lease is spread over an area of 23.800 ha and it falls in Survey of India Topo Sheet Open Series Map No. F45N16, F45T09, F45T13 & F45U1 (73G/12) with co-ordinates Latitude: 21° 01' 00.57" N to 21° 01' 29.29" N and Longitude: 85° 44' 18.96" E to 85° 44' 38.02" E. Kalarangiatta Chromite Mine is situated in Jajpur district of Odisha. Tomka Mangalpur Highway passes along the northern boundary of the lease area. Tomka Railway Station is situated about 26.08 km (aerial distance) in ENE-direction from lease area. Biju Patnaik International Airport, Bhubaneswar is about 85.87 km (aerial distance) in S-direction from lease area.
7. **Topography** - The entire lease area is a flat terrain having a gentle slope of 20° from South to North. Maximum elevation: 108 mRL in the Southern Part. Minimum elevation: 96 mRL in the Northern Part. There is no seasonal or perennial surface water body in the mine lease area. Damsal nala, flows next of ML area in N, forms the major drainage

of the study area. HFL is at 86mRL. Bottommost elevation of the surrounding lease area is 96mRL.

8. Environmental Clearance is received for production of 0.05 MTPA Chromite Ore vide letter no. J-11015/183/2007/I.A.II(M) dated 13.05.2009 .
9. Govt. of Odisha granted mining lease for 39.318 Ha in Kalarangiatta village, Tehsil Sukinda, District Jajpur on 03.11.2001. M/s Facor proactively surrendered 15.518 Ha of forest land and mining lease was executed for 23.8 Ha of non-forest revenue land on 18.04.2008 for 30 years. Mining operation started from 01.11.2011. In compliance to the MMDR Amendment Act 2015, the mining lease period extended for 50 years i.e. up to 17.04 2058.
10. Based on MOEF & CC circular dated 10.03.2015 & as per Sabik settlement records, the status of ML area of 23.800 Ha as on 25/10/1980 is now interpreted as revenue forest land of Sal Jungle Kisam for which forest diversion proposal is under process and in advance stage. Mining operation is going on as per Hon'ble High Court order.
11. In the year 2020, Hon'ble National Company Law Tribunal (NCLT) Cuttack Bench under the provisions of Insolvency and Bankruptcy Code (IBC) -2016 vide its order dated 30.01.2020, has approved the resolution plan of M/s. Sterlite Power Transmission Limited (a group of Vedanta Ltd.). Pursuant to the said order of NCLT Cuttack, the Board of Directors of M/s. Ferro Alloys Corporation Ltd. have also been changed with effective from dated 21.09.2020.
12. Based on the recent exploration activity, updated mine reserve & resource data and updated mining plan, this expansion proposal was submitted to IBM for approval under Rule 17(3) of MCR, 2016 including Progressive Mine Closure Plan under Rule 23 of MCDR, 2017 on the account of production enhancement. IBM has approved the modification of Review of Mining Plan Vide Letter. No. MRMP/AA/09-ORI/BHU/2021-22, Dated. 29.07.2021.
13. **Modified Review of Mining Plan** was approved by IBM, Bhubaneswar dated 29.07.2021 with letter no. MRMP/AA/09-ORI/BHU/2021-22.
14. **Consent to Operate** Consent to Operate has been obtained from SPCB, Odisha in respect of Kalarangiatta Chromite Mines vide Letter No. 4158/IND.I CON.6318 dated 17.03.2022, Consent for discharging of sewage and trade effluent under Sec. 25/26 of Water (PCP) Act 1974 and existing/new operation of the Plant under section 21 of Air (PCP) Act 1981 for rated production of 50,000 Tons of Chrome Ore. Validity of CTO 31.03.2023..
15. **Hazardous Waste Authorization** from SPCB, Odisha vide letter no.: IND-IV-HW-1018/7540, dated 20.08.2020, Valid till 31.03.2022
16. **Ground water withdrawal permission (NOC)** was obtained from CGWA, Vide Ref No. CGWA/NOC/MIN/REN/1/2021/6526, Dated 06.08.2020.

17. **Forest Diversion proposal of Facor** Pursuant to the guideline dated 10.03.2015 of MoEF&CC bearing no. 8-78/1996-FC(Pt.) the total area of 23.800 Ha of non-forest land as per Hal Record was found to be having forest land as per Sabik Record (as on 25.10.1980). In view of above, Forest Diversion proposal was filed for total area of 23.800 Ha of forest land (as per Sabik Record on dated 11.11.2015 for obtaining approval of MoEF&CC as per Forest Conservation Act 1980.
18. **Surface right** over 22.739 Ha has been granted by State Government vide Letter No. 4904, Dated 05/05/2010
19. **Reserves** - Geological Reserves is 1.487 Million Tonnes and Mineable Reserves is 0.859 Million Tonnes (as on 31.05.2021). Based on the present reserve estimates and proposed production program, the life of mine is estimated to be about 6 years, which will increase with planned future exploration, road diversion and slope steepening.
20. **Method of Mining** - Fully mechanized Open cast mining is proposed to be carried out during the plan period. The operations like digging, excavation and removal of ore will be done with the help of heavy earth moving machineries. Drilling or blasting is not envisaged at present. However, it will be carried out as per requirement in future with necessary statutory approval.
21. **Production Details:** 0.150 Million TPA Chrome Ore (ROM), max excavation of 0.438 Million CuM per annum. Year wise production details is:

Year	Total Excavation (Tonnes)	ROM (Tonnes)	Waste Generation Top Soil (Tonnes)	Waste Generation OB/SB/IB	ROM:Waste Stripping Ration
2021-22	399600	63600	2800	336000	1:5.33
2022-23	932000	150000	3600	782000	1:5.24

22. **Water Requirement:** About 80 KLD water will be required for dust suppression, plantation, wheel wash, drinking & domestic activities, etc. Mine pit water will be used for dust suppression and plantation activities. Ground water from borewell will be used for drinking and domestic use. Necessary permission for 20 KLD groundwater extraction from borewell and 700 KLD dewatering has been obtained from CGWA by the lessee and the same will be renewed.
23. **Power Requirement:** Currently, 33 KV power is stepped down through 11 KV substations and distributed throughout the mines. A contract demanding 198 KVA with total connected load of 180 KW has been made. Three DG set (250 KVA, 35 KVA, 15 KVA) are deployed to cope up with the power interruption that takes place due to low voltage and frequent tripping.
24. **Employment Potential** - The project will generate 233 manpower for the proposed expansion in the mine.
25. Baseline Environmental Monitoring for Air, water, Noise and Soil has been carried out during Pre Monsoon season (Mar 2021 - May 2021).
26. Total Cost of the proposed project will be ` Rs 12.18 Crores.

27. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Pollution load comparative statement of hexavalent chromium in soil, water and nearby water bodies.
- ii) Pollution load of fluoride content w.r.t to groundwater usage in terms of domestic usage of water.
- iii) Permission from WR department for withdrawal of groundwater.
- iv) Settling pond and ETP design and capacity.
- v) Technical write up on handling of tailings and its management.
- vi) Comparative statement of salient physical features and salient features with reference to environmental parameters of the existing mines and proposed expansion shall be submitted.
- vii) Year wise production details after EC granted.
- viii) Cross-sectional dimension of retaining wall and garland drain shall be furnished.
- ix) Compliance to earlier EC conditions duly certified by the Regional Office, MoEF&CC, Bhubaneswar and Compliance to CTE & CTO conditions duly certified by the SPCB, Odisha.

#### **ITEM NO. 05**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PATAMUNDA MANGANESE MINE OVER AN AREA OF 43.532 HA. AT VILLAGE: PATAMUNDA, TAHASIL: KOIDA, DISTRICT: SUNDERGARH FOR M/S SUN ALLOYS & MINERALS LTD OF SRI RAJIB LOCHAN MOHANTY – EC (VIOLATION CASE).**

1. M/s. Sun Alloys & Minerals Ltd. for Patamunda Manganese mines over an area of 43.532 Ha. at Village - Patamunda, Tahasil - Koida, District - Sundergarh, Odisha of Sri Rajib Lochan Mohanty (Managing Director).
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Patmunda Manganese Mining Lease in village Patmunda of Sundergarh District Odisha was granted over an area of over 81.197 Ha in favour of Sun alloys & Minerals Ltd on 23.10.1991 which was executed on 12.02.1996 for 10 years i.e. till 11.02.2006.
4. This is an existing mine operating since 1996-1997 to 2009 and closed since 2009. As the mining was operating without obtaining prior- environment clearance the project will be appraised for Environment clearance under case of violation.



5. Based on the approved ToR vide letter no. 4301/SEIAA dated 02.04.2022, the EIA/EMP report, Damage assessment and remediation plan and natural and community resource augmentation plan has been prepared by M/s Kalyani Laboratories Private Limited, Bhubaneswar.
6. The public hearing for the Patmunda Manganese Mines of Sun Alloys and Minerals Ltd. conducted on 10.04.2012 at 10.00 A.M. at Madan Mohan High School field, Patmunda Village of Sundergarh district in accordance with the Ministry of Environment & Forest, Govt. of India, EIA Notification No. SO-1533 (E) dated 14th September 2006.
7. As the project is declared as a case of violation, the damage assessment, remediation plan, community and natural resource augmentation plan has been prepared. As per the plan the allocated budget for remediation plan based on the damage assessment due to violation is Rs. 22,38,000.00, Budget due to community and natural resource augmentation plan will be Rs. 43,00,000.00 and penalty due to violation will be Rs.1,83,372.00.
8. First RML application was filed on 04.02.2005 (one year before the expiry of the lease) for 20 years (from 12.02.2006 to 11.02.2026) on a reduced area over an area of 43.568 Ha deleting 37.629 Ha area occupied by tenants and local inhabitants within the executed ML area of 81.179 Ha. Mining operation continued within the ML area till 22.12.2009 under deemed clause of Rule 24 A (6) of MCR 1960. Mining operation within the ML was closed by the DFO, Bonai vide letter No 6264 dt 22.12.2009 for want of forest clearance over an area of 0.036 Ha of DLC forest land.
9. The lessee again deleted 0.036 Ha DLC area from 43.568 Ha of applied RML area and submitted a letter to the Principal Secretary to Government, Department of Steel & Mines, Govt. of Odisha vide letter no. SAML/CO/2010-11/08-06 dated 06.08.2010 along with a fresh map over 43.532 Ha for consideration in respect of renewal of the lease area. The lessee deposited the demanded amount of Rs 2,03,00,894.96 (Rupees two crore three lakh eight hundred ninety four and ninety six paise only) arising out of the final judgement of the Honourable Apex court dated 02.08.17 in the aforesaid Common Cause Matter of WP (C) 114/2014 related to Section 21 (5) of MMDR Act 1957. Based on the order of RA, lessee submitted his request to the state Govt for revocation of the lapsing order on 10.01.19 and 06.03.21 which is under active consideration.
10. The Mining Lease was subsisting as on 12.01.2015, the date on which the MMDR Act, 1957 was amended. As per the provisions of Section 8A (3) read with Section 8A (9) of the amended provisions of the Act, the period of the Mining Lease is deemed to have been extended up to 11.02.2046 (for a total period of 50 years).
11. The application for EC was made by the lessee and public hearing for the said project was conducted on 10.04.2010.
12. The proposal was considered for EC at SEAC, Odisha on 18.10.2012 and Member Secretary State Environment Impact Assessment Authority (SEIAA) Odisha vide Letter No 365/SEIAA dated 27.12.2012 asked to submit the authentic copy of Stage – I Forest Clearance within 12 months for issuance of Environmental Clearance. In reply the lessee submitted a letter to Member Secretary SEIAA vide their letter No SAML/CO/2012-13/03-21 dated 11.03.2013. In this letter the lessee informed that the revised RML area over 43.568

Ha includes 0.036 Ha DLC forest land in south eastern boundary of the lease which has been deleted, retaining the RML applied area of 43.532 Ha. FMCP on 0.036 Ha area which was approved by IBM vide Letter No ORI/BHU/2011-12 Dated 28.10.2011.

13. Replying the above letter of the lessee Member Secretary SEIAA issued a letter (Letter No 726/SEIAA dated 28.04.2014 –to submit the proposal afresh as per EIA Notification 2006.
14. State Pollution Control Board, Odisha accorded Consent to Establish vide their letter No 22809/IND-II-5429 dated 12.11.2012.
15. At the initial stage with reference to the application of the lessee dated 27.03.2006, OSPCB, Bhubaneswar issued consent order for air (Prevention & Control of Pollution) & Water (Prevention & Control of Pollution) vide their letter dated 13.07.2006 for production of manganese ore to the tune of 300 tonnes per month for Air/18B for Water). This was valid upto 31.03.2011.
16. Mining within the ML area started in 1997-98 and continued till 2009-10 and was closed by the DFO, Bonai vide letter No 6264 dt 22.12.2009 (Annexure XIX) for want of forest clearance over an area of 0.036 Ha of DLC forest land. The mine is yet to be re-opened.
17. The Mine was operating since 1997-98 and continued operation till 2009-10 without obtaining Environment clearance. Environment clearance is applicable to the mines under EIA Notification 1994 as well as 2006.
18. Violation has been made by the lessee under E(P) Act, 1986 and the application for ToR has been made under the case of violation.
19. The mining plan approved in 2016-17 and due to lack of violation, this mining plan was lapsed in 2015. The lease area is reduced to 43.532 Ha in the renewal application. Proposed production from the lease area during the revised scheme period from 2016-17 to 2020-21.
20. Final Mine Closure Plan on 0.036 Ha DLC area was approved vide IBM Letter No FMCP/OTFM/03-ORI/BHU/2011-12 dated 28.10.2011. Certificates obtained under sub rule (2) of rule 29 (A) of MCR 1960 on approved FMCP over 0.036 Ha. Accordingly, a letter was submitted to The Principal Secretary to Government, Department of Steel & Mines, Govt. of Odisha vide letter no. SAML/CO/2010-11/08-06 dated 06.08.2010 along with a fresh map for considering the RML area as 43.532 Ha. As Per Mines & Minerals (Development and Regulation) Amendment Act 2015 the lease shall be extended for a period of forty years i.e., 11.02.2046 (Total lease period is 50 years) w.e. from 12.02.1996.
21. Recent mining plan approved by Indian Bureau of Mines, Bhubaneswar vide letter no: RMP/A/04-ORI/BHU/2021-22, dated 17.06.2021.
22. **Location and Connectivity:** Patmunda Manganese ore Mines over an area of 43.568Ha. located in Patmunda Village, under Sub-division Bonai, Tahsil Koida in Sundargarh District, Odisha. Out of the total lease area 43.568 Ha, 43.532 Ha Govt. non-forest land, and 0.036Ha is Govt. forest land. Lease area is a part of Survey of India toposheet No 73G/5 and is bounded by the latitudes from Latitude 21<sup>o</sup> 52' 15.58"N and Longitude 85<sup>o</sup> 18'16.839"E as per survey. Nearest railway stations is Barbil Railway Station at an distance of 45 Km. Nearest town is Koira is 10km. State capital Bhubaneswar via Jajpur – Keonjhor

Road, is at a distance of 318 km where Airport is there. Rourkela Steel City via Lohanipura and Koira – Bhadrasahi is at a distance of 115 km. Jamsedpur via Chaibasa and Noamundi is 185 km far from the lease area. Paradeep port is at about 310 km and nearest NH is NH 215 at a distance of 6 km from the lease area. Suna River at a distance of 4.5Km. Nearest Reserve forest is Khajurdihi RF – 4.8km.

23. **Reserves** - The mineable reserve of manganese ore in the lease area is 1,98,538 MT. In the ensuing plan period about 21,734 MT will be exploited. After this plan period balance mineable reserves of 1,77,164 MT of manganese ore will be available. Keeping in view the production of manganese ore @5500 per annum, life of the mine will be 32.21 years or say 33 years after the current plan period. So, total life of the mine will be 33 years including this plan period.
24. Presently there are four existing quarries namely Quarry-1,2,3 and 4. There are seven nos. of existing dumps are present in the lease area.
25. **Method of Mining** - Open cast semi mechanized system of mining is in practice since long to mine the manganese ore deposit adopting a system of bench formation keeping In mind the quality, cost, safety and conservation of mineral. No change in method of mining has been envisaged during the proposed review period. Quarry-2 and 4 shall be developed during the proposed review period (2022-2023 to 2025-26) from the insitu ore zone with lateral and depth ward extension. There is no regular need of blasting in the over burden and mineralized zone for development and ore production. Once the mineralized zone is exposed, low scale drilling shall be required which will be done by rock drill machine attached with compatible compressor for loosening the ore zone formation.

26. **Production Details:** The different types of ore production year-wise is given as follows:

Year	Total Saleable ore(MT)	Total Mineral Reject (MT)	Total ROM (MT)
2021-22	52 numbers diamond core drilling under exploration programme		
2022-23	5346	0	5346
2023-24	5445	0	5445
2024-25	5434	0	5434
2025-26	5509	0	5509
Total	21734	0	21734

27. **Waste management** - A total quantity of 145245 m3 waste (generated from the lease area + Rehandled existing waste dump) will be accommodated on the proposed dump over an area of 2.014 Ha. At the end of the conceptual period the total waste over the proposed dump will be utilized for backfilling of the exhausted quarries. Conceptually,7272 MT of mineral rejects will be generated. This mineral rejects will be stored in the earmarked site covering an area of 0.18 Ha. These mineral rejects shall be blended as far as practicable as per the demand of buyers.
28. **Green Belt** - During the period of operation of lease the lessee has planted nos of saplings. During the existing plantation of 1995 saplings. In the ensuing scheme period, an area of 2.35 Ha. along the safety zone has been proposed for plantation of 5900 saplings..

29. **Water Requirement** - Water consumption will be limited to 20 KLD which consist of 5KLD for domestic (Permission obtained from CGWB), 5 KLD for dust suppression, green belt development purpose. Water for drinking / domestic use will be sourced from the ground water while water for non-domestic use such as plantation, water sprinkling etc. will be sourced from water harvesting ponds.
30. **Power Requirement** - Electricity is available in the M.L area. As the mine is operated in day shift only, there is no necessity of power for illumination at mines. Energy required: Diesel 800 Ltr/ Day.
31. A total no. of 68 people will be employed in the mines (departmentally/contractually) which includes 6 managerial and supervisory staff, High Skilled and Skilled staff 12 nos., and 50 nos. of workers phase wise manner.
32. Baseline study was conducted during October – December, 2021. The observations are Ambient air quality monitoring carried out in 8 different sampling locations. During the study period, the concentration of PM10 in the project site varies from 46 to 57 $\mu\text{g}/\text{m}^3$  and from 46.4(Ramka Village) to 85.5(Koida)  $\mu\text{g}/\text{m}^3$  in the nearby villages. The average value of PM2.5 in the project site is 23 to 25 $\mu\text{g}/\text{m}^3$  and the average of PM2.5 varies from 23.3 (Podadihi) to 44.5(Koida)  $\mu\text{g}/\text{m}^3$  in the surrounding villages. Other parameters like, SO<sub>2</sub>, NO<sub>x</sub>, CO, Ozone, are within the prescribed limit of NAAQS standard as prescribed by CPCB.
33. The ground water samples were collected from 8 different sampling stations and analyzed as per IS 10500:2012 to assess the portability of the ground water.
34. As Per the data it has been observed that the pH of the ground water varies 6.50 to 6.80, Chlorides Ranges From 12.0 to 44 Mg/L, Sulphates value found to be between 2.4 to 20.9 mg/l, Fluoride Ranges low in lease area i.e. 0.12 to 0.39 mg/l, Hardness varies from 32-168 mg/l, and Total dissolved solid 40-210 mg/l.
35. The ambient noise levels were measured in 8 sampling locations. In the project site the day time noise level is 29.5 dB (A) and the night time noise level is 22.4 dB (A). The maximum noise level is 50.4 dB (A) during the day time at Koida Village and minimum noise level is 29.5 dB (A) during the day time at lease area. The maximum noise level is 42.6 dB (A) during the night time at Koida Village and minimum noise level is 22.4 dB (A) during the night time at lease area. The noise level is found to be maximum in Koida Village.
36. The cost of Project is ` 295 lakh. The allocated capital EMP cost for the project will be Rs. 67.5 Lakhs and 17.6 Lakhs allocated as recurring EMP cost.
37. The Environment Consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar** along with the proponent made a detailed presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Pvt. Ltd. Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Compliance to NEERI recommendation for Manganese mine expansion to be submitted.

- ii) Detailed plan for Dump management and dust suppression and mitigation measures suggested towards issues raised in Public Hearing.
- iii) Details of Public Hearing with proposed redress point wise to be submitted.
- iv) Safety measures to protect Damsala Nala.
- v) Cross-sectional dimension of retaining wall and garland drain shall be furnished.
- vi) Conversion of agricultural lands to mining use with help of concerned Authority Revenue Department.
- vii) Specific measures taken Manganese poisoning in that area.
- viii) Reclamation Plan for Dump after conceptual plan.
- ix) Budget details of EMP.
- x) Details of DLC land surrendered and the same acceptance Letter by IBM to be submitted.
- xi) Native/local species should be planted which has survival rate is 90%. And increase the greenbelt plantation within lease area.
- xii) Status of legal case filed if any under section 19 of Environment (Protection) Act, 1986 for violation.
- xiii) Conversion of Agriculture land for use of mining purpose.

#### **ITEM NO. 06**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR SARUABIL CHROMITE BLOCK (ML AREA: 246.858 HA) WITH A PRODUCTION OF 1.0 MTPA CHROMITE ORE (ROM) WITH MAXIMUM EXCAVATION OF 6.48 MILLION CUM PER ANNUM THROUGH OPENCAST MINING AT VILLAGES SARUABIL, KAMARDA, & TAILANGI UNDER SUKINDA TEHSIL, JAJPUR DISTRICT FOR M/S. TATA STEEL MINING LIMITED OF SRI BIBHU DUTTA NANDA - EC**

1. The proposal is for Environmental Clearance for Saruabil Chromite Block (ML Area: 246.858 Ha) with a production of 1.0 MTPA Chromite Ore (ROM) with maximum excavation of 6.48 Million Cum per Annum through Opencast Mining at villages Saruabil, Kamarda, & Tailangi under Sukinda Tehsil, Jajpur District for M/s. Tata Steel Mining Limited of Sri Bibhu dutta Nanda.
2. The project falls under Category-B ( $\leq 250$  ha in respect of major minerals other than Coal) as per MoEF&CC Notification No. S.O. 1886(E) Dated 20<sup>th</sup> April, 2022.
3. The M/s Misrilall Mining Pvt. Ltd. operated in Saruabil Chromite Block from 15.05.1954 till 31.03.2020. Odisha Government had issued the Letter of Intent (LOI) for Chromite ore mining in Saruabil Chromite Block to Tata Steel Mining Limited (formerly known as M/s T S Alloys Limited) over an area of 246.858 Ha for a period of 50 years vide letter no. 223/SM dated 6th January 2020. In terms of section 8B(2) of MMDR Act, 1957 read with rule 9A(4) of MCR, 2016, the bidder is deemed to have acquired all valid rights, approvals, clearances, licenses and the like vested with the previous lessee for a period of two 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 vide letter no. 4174/SM dated 29th May 2020. Lease deed for the Saruabil Chromite Block was executed on 26th June 2020.

4. Terms of Reference was granted by MoEF & CC dated 29.12.2020. Public Hearing was conducted on 22.12.2021.
5. The proponent has applied to SEIAA, Odisha for EC as category B as per MoEF&CC Notification No. S.O. 1886(E) Dated 20<sup>th</sup> April, 2022.
6. **Location and Connectivity:** The Saruabil Chromite Block is spread over an area of 246.858 Ha and it falls in Survey of India Topo Sheet Open Series Map No. F45N16 (73G/16) with co-ordinates Latitude: N 21°02'42.64" to 21°03'49.65" and Longitude: E 85°48'35.38" to 85°49'49.92". Saruabil Chromite Block is situated in Jajpur district. Tomka Mangalpur State Highway passes through the lease area. The nearest National highway, NH – 200, is situated about 10.5 Km aerial distance from the proposed area and the Chromite block is at about 23 Km Road distance from Daitari Railway Station and 136 km distance from Biju Patnaik airport, Bhubaneswar.
7. The previous Environment Clearance for the project was granted in the name of M/s Mishrilal Mines Pvt. Ltd. for production of 0.35 MTPA Chromite Ore with expansion of Chromite Ore beneficiation plant from 20 TPH to 30 TPH by MoEF vide letter no. J-11015/72/2010-IA. II(M), dated 20.07.2018.
8. Mining Plan approved by IBM, Bhubaneswar dated 18.05.2018. Mining Plan of TSML was approved on 10.11.2020.
9. Environmental Clearance for production of 0.35 MTPA Chromite Ore and enhancement of Chrome Ore beneficiation plant from 20 TPH to 30 TPH from MoEF&CC dated 20.07.2018. However, COB plant has been dismantled by previous lessee.
10. Forest Diversion over 224.63 Ha of entire forest land involved from MoEF&CC dated 16.01.1997, (As per Sabik settlement application for diversion of 17.14 ha is in process)
11. The proponent has obtained Consent to Establish from SPCB, Odisha dated 29.11.2016 and Consent to Operate from SPCB, Odisha dated 16.03.2022.
12. Surface right from District Collector, Jajpur over 242.581 Ha has been obtained.
13. Ground water with drawl permission has been obtained from CGWA, (GoI) dated 16.07.2019.
14. Deep hole blasting & use of HEMM has been obtained from DGMS, (GoI) dated 19.03.2019 (TSML has also obtained the fresh 106 (2) (B) on 28.05.2021).
15. **Method of Mining** - The current project involves mining of Chrome Ore (Chromite) through a Fully Mechanized Opencast mining method with HEMM and deep hole blasting. The proposed production capacity is 1.0 Million Tonnes Per Annum of Chromite Ore (ROM) with total excavation of 6.48 Million Cubic Meters per Annum. The bench height will be about 6 m with width of 10 m. Bench slope has been designed at 70°. Maximum Overall Pit Slope angle 30°. Study of further slope steepening has been initiated under the guidance of CIMFR, Dhanbad. For Drilling and blasting - 150 mm diameter holes are drilled with depth of 6 to 8 m in ore body. Holes will be charged with SME with booster. Powder factor of 7

MT/kg in Ore. For Transportation - Dumpers (44 nos of 35 tonne capacity) are being used to transport the ore from quarry to stack yard.

**16. Production Details for the plan period (2020-21 to 2024-25)**

<b>Ore &amp; OB Excavation during the plan period (2020-21 to 2024-25)</b>				
<b>Year/ Pit No.</b>	<b>Total ROM Production (MT)</b>	<b>Total ROM Production (CuM)</b>	<b>OB/Waste Volume from Development of Pits (CuM)</b>	<b>Total Excavation (CuM)</b>
<b>1<sup>st</sup> year (2020-21)/ B &amp; C</b>	150000	44200	1,195,000	12,39,200
<b>2<sup>nd</sup> year(2021-22)/ B &amp; C</b>	400000	117800	1,491,000	16,08,800
<b>3<sup>rd</sup> year (2022-23)/ B &amp; C</b>	450000	132500	2,007,000	21,39,500
<b>4th year (2023-24)/ B &amp; C</b>	700000	206100	3,639,000	38,45,100
<b>5th year (2024-25)/ B &amp; C</b>	900000	264900	5,571,000	58,35,900
<b>5th year (2024-25)/ D</b>	100000	29400	619,000	6,48,400
<b>Sub Total (5<sup>th</sup> Year)</b>	<b>1000000</b>	294300	6,190,000	64,84,300
<b>Total</b>	<b>2700000</b>	794900	14,522,000	1,53,16,900

**17. Power Requirement:** The fully mechanized mining will be done in a three shift of 8 hours each. The use of electricity will be for lighting/illumination/pumping purposes in mining operations and will be obtained from CESU/ Tata Power/ Any other. The electricity/DG power will be provided at the office, camp, and mines. Power requirement of ~1000 KVA would be met from local grid maintained by Central Electricity Utility Services (CESU)/ Tata Power/ Any other.

**18. Water Requirement:** Total water requirement has been estimated to be 330 KLD. There are 2 borewells located inside the mine lease area. As the mine workings has intersected the groundwater table, seepage of groundwater is expected. Dewatering of mine will be undertaken and the water will be utilized for various purposes. Water requirement and usage has been detailed in table.

<b>Activities</b>	<b>Daily Water Requirement, KLD</b>	<b>Effluent Generation, KLD</b>	<b>Losses, KLD</b>	<b>Treatment</b>	<b>Source of water</b>
Drinking & Domestic Use, Canteen	40.00	32.00	8.00	Septic tank/ Soak Pit	Ground water from Borewell
Dust suppression	250.00	0.00	250.00	--	Mine pit water
Plantation & Gardening	100.00	0.00	100.00	--	Mine pit water

Workshop, Wheel wash & Vehicle wash	10.00	8.00	2.00	Treatment in Oil & Grease trap, recycled for wheel wash & dust suppression	Mine pit water
ETP wash water	20.00	0.00	20.00	--	Mine Pit water
<b>Total</b>	<b>420.00</b>	<b>40.00</b>	<b>380.00</b>		

19. Baseline study was conducted during October – December, 2020. The observations are Ambient air quality monitoring carried out in 8 different sampling locations. During the study period, the concentration of PM10 = 29 to 64.1 µg/m<sup>3</sup>, PM2.5 = 17 to 38.5 µg/m<sup>3</sup>, SO<sub>2</sub> = <4 to 8.1 µg/m<sup>3</sup>, NO<sub>x</sub> = <9 to 13.6 µg/m<sup>3</sup>.
20. The ground water samples were collected from 8 different sampling stations and analyzed as per IS 10500:2012 to assess the portability of the ground water. As Per the data it has been observed that the pH ranges from 5.06 to 7.78, total hardness varies from 14 to 180 mg/l, chloride ranges from 3.8 to 38 mg/l, TDS ranges from 20 to 316 mg/l.
21. The surface water samples were collected from 8 different sampling stations. As Per the data it has been observed that the pH ranges from 7.21 to 7.84, DO ranges from 4.4 to 6.3 mg/l, COD ranges from 6.0 to 20 mg/l.
22. The ambient noise levels were measured in 8 sampling locations. As Per the data it has been observed that Ambient noise ranges from 36.7 dBA to 60.4 dBA.
23. The soil samples were collected from 12 different sampling stations. As Per the data it has been observed that pH ranges from 7.03 to 7.24, SAR ranges from 2.6 to 4.4 %, clay percent ranges from 59.8 to 73, all the metals are below detectable level.
28. **Employment Potential** - The project will generate 650 manpower in the mine.
29. Total Cost of the proposed project will be ` Rs 179.91 crore with a recurring cost of 66.93 crores and EMP cost is ` Rs 26.75 crore with a recurring cost of 1.79 crores.
30. The project proponent along with the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i) Comparative statement of salient physical features and salient features with reference to environmental parameters, pollution load of the existing mines and proposed expansion shall be submitted.
- ii) Tailing pond and its design existing and proposed and how it will contribute to zero discharge concept.



- iii) Approval letter for 33KLD usage of ground water and application made for proposed expansion to be submitted.
- iv) Detailed plan for controlling hexavalent Chromium in ground water, surface water and soil surface.
- v) Suggestions for adaptation/evaluation of new technologies like Ion Exchange Technology, Membrane technology for removal of hexavalent chromium.
- vi) Effective measures taken safety of Damsala Nala.
- vii) Cross-sectional dimension of retaining wall, check dam and garland drain shall be furnished.
- viii) Report on mining activity done on forest and non-forest area.
- ix) Details of Solar generation to be used.
- x) Nature of 5ha. Non forest land present in mining area.
- xi) Copies of compliance to all ADS by the MoEF&CC, Govt. of India and copies of minutes of all meetings of EAC of MoEF&CC, Govt. of India.
- xii) Compliance to earlier EC conditions duly certified by the Regional Office, MoEF&CC, Bhubaneswar and Compliance to CTE & CTO conditions duly certified by the SPCB, Odisha.
- xiii) Tailings pond and ETP management with flow diagram and water balance.

#### **ITEM NO. 07**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PROPOSED SPIRIT PLANT (MALT SPIRIT, CORN SPIRIT & GIN SPIRIT) OF 10 KLPD CAPACITY (PHASE- 1:5 KLPD + PHASE- 2:5 KLPD) AT VILLAGE- KOTHADWARAPALLI, MOUZA- RAMBHA, TAHASIL - KHALIKOTE, DISTRICT – GANJAM OF M/S CROCHET INDUSTRIES PVT. LTD OF SRI ERRAMILLI VENKATACHALAM PRASAD – TOR**

1. The proposal was considered by the committee to determine the “Terms of Reference (ToR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. M/s Crochet Industries Pvt. Ltd. is applying for Environment Clearance for Spirit Plant (Malt Spirit, Corn Spirit & Gin Spirit) of 10 KLPD capacity (Phase-1: 5 KLPD + Phase-2: 5 KLPD) proposed over an area of 1.128 Acres.
3. The proposed project falls under category “B” Project or activity 5(g) as per EIA notifications 2006 and its subsequent amendments.
4. **Location & Connectivity:** The proposed project of M/s. Crochet Industries Pvt. Ltd. is located at Village- Kothadwarapalli, Tahasil- Khalikote, District- Ganjam, Odisha. The project site falls in Survey of India Toposheet Open Series Map No. E45B2 and geo-coordinates is Latitude: 19°31'27.26"N to 19°31'29.56"N and Longitude : 85°04'29.87"E to 85° 04'33.27"E. The mine is well connected by NH-16, which is about 0.80 km in East and SH – 31 is at 8.78km. Nearest Railway Station is Rambha which is about 2.50 Km in NE direction. Biju Patnaik International Airport, Bhubaneswar at 111.93 Km NW, from the

project site in NE direction. Nearest water body is Chilika Lake- 2.08km, nearest reserve forest is 0.37km. Natural Nala is at 1.53 km in NE.

5. **Process Manufacturing and products** - The barley malt consignment will be received by the Store & QA department. Initial sample testing will be done to confirm the desired quality of the malt. The received malt consignment details, quantity & quality will be recorded and malt unloaded into silo/godown. Then malt from silo/godown will be conveyed into the cleaning / grinding section. Grist from malt mill will be stored in a bin, which will be later mixed with hot water in pre-masher and transferred to mash tun for brewing. Then wort will be drawn from bottom of mash tun and collected in hot wort tank. From this tank, hot wort will be transferred to yeast activation vessel and some portion to fermenters. After sufficient yeast growth in yeast activation process, the wash will be transferred to fermenter to start a fresh batch of fermentation. After fermentation, distillation of wash will be done in two stages. First, alcohol from wash will be separated as low wine. Then collected low wine will be mixed with fients of previous batch. Volatiles from low wine will be collected in fients tank as heads fraction. FMS is then tested for complete removal of volatiles which will be collected in FMS receiver. Sample from FMS Receiver will be tested for acceptance of quality, which will be transferred to maturation hall after confirmation of desired quality.
6. **Raw Materials and its source** – The below table states the raw material used for the process and their procurement.

S.No.	Particulars	Quantity (Per day)	Source	Mode of Transportation
i)	Malt	8.4 MT	Punjab	Road
ii)	Corn	5 MT	Punjab	
iii)	ENA	2.4 KL	Local Distilleries	
iv)	Rye	1 MT	Punjab	
v)	Maize	1 MT	Punjab	
vi)	Husk	58 MT	Local Suppliers	
vii)	Juniper	0.5 MT	Local Suppliers	
viii)	Chemical: NaOH	80 L	Local Suppliers	

7. **Water Requirement** - The total water requirement for the proposed spirit plant is 720 KLD. Water required (about 9 KLD) will be met from ground water sources through borewell and rest will be sourced from Rambha NAC through tankers. The waste water generated during the process will be treated in ETP of 120 KLD capacity and the domestic sludge will be treated in STP of 114 KLD capacity.

S.No.	Particulars	Requirement (KLD)
i)	Water for Malt Spirit	320
ii)	Water for Corn Spirit	290
iii)	Water for GIN Spirit	10
iv)	Domestic Use	15
v)	Drinking Purpose	5

S.No.	Particulars	Requirement (KLD)
vi)	Greenbelt/Plantation	80
	<b>Total</b>	<b>720</b>

8. **Steam Requirement and Source** - Approximately 60 Metric Tons per day/2.5 TPH of steam requirement is envisaged for this proposed project. The requirement will be achieved by employing either a horizontal smoke tube or packaged type boiler operating on husk feed.

Sl. No.	Particulars	Requirement (Metric Ton per day)
i)	Malt Spirit	25
ii)	Corn Spirit	25
iii)	GIN Spirit	10

9. **Power Requirement** - The total power requirement for the project is estimated to be 500 KW which will be sourced from nearest grid of TPSODL Utility at Rambha. DG sets of 500 KVA are envisaged to fulfill the emergency power supply during power failure.
10. **Solid waste generation and Management** - The solid waste generated from both the Boilers shall be Spent grains from process is 8TPD, Fly ash 7 TPD and sludge from ETP and STP is 120 KLD. Solid waste from the plant operations generally comprises of fibers and proteins in the form of DWGS, which will be ideally sold as Cattle Feed. Fly Ash from the boiler will be sold to brick/cement manufacturers. Used oil & grease generated from plant machinery / gear boxes & DG Set will be partly used in oiling & greasing as lubrication of external parts of machinery & partly will be sold to CPCB authorized recycler. The project will be based on “Zero Effluent Discharge”.
11. **Employment Potential** - The project generates direct/permanent employment opportunities for 30 persons and indirect/temporary 50 persons.
12. **Greenbelt** - Out of the total plot area about 0.372 Acres (33% of total area) land will be developed as green belt.
13. The cost of the project is Rs.24.455 crores and budget for EMP is Rs.1.4 crores (capital cost) and 0.15 crore/annum as recurring cost.
14. The Environment consultant **M/s. Ascenso Enviro Pvt. Ltd. Noida** along with the proponent has made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s. Ascenso Enviro Pvt. Ltd. Noida**, the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure – A** for conducting detailed EIA study.

- i) Land to be converted to Industrial Use in terms of Sabik record before start of the construction work.
- ii) Details of water requirement met from Rambha NAC with supporting documents.
- iii) Submit a write up on the usage of STP of capacity 100KLD.
- iv) Detail report on waste management.

- v) Quality and quantity details of by product to be used as cattle feed.
- vi) Detailed report on Ash management from process to disposal.
- vii) Detail report on zero liquid discharge concept in project site.
- viii) Detailed report on Hazardous waste disposal management to be submitted.
- ix) Dense plantation needed to be carried out within safety zone to reduce odour emission to surroundings.

**ITEM NO. 08**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION OF 1NO. BLOCK OF (2B+S+33), 5 NOS. BLOCKS OF (2B+S+29), 1 NO. BLOCK OF MULTISTORIED RESIDENTIAL APARTMENT AND 1 NO. OF (2B+G+2) CLUB HOUSE OVER PLOT NO.- 309/1694 AND KHATA NO.- 475/5 OVER BUILT-UP AREA OF 1,85,262.81 SQM OF MOUZA-PATIA IN FAVOR OF M/S PALTRONICS ALLIED INDUSTRIES PVT. LTD OF SRI AMAN AGRAWAL – TOR**

1. The proposal was considered by the committee to determine the “Terms of Reference (ToR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
2. The project falls under category “B” or activity 8 (b)-Building & Construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
3. M/s Paltronics Allied Industries Pvt. Ltd for Construction of 1no. Block of (2B+S+33), 5 nos. blocks of (2B+S+29), 1 no. block of Multistoried Residential Apartment and 1 no. of (2B+G+2) Club House over Plot No.- 309/1694 and Khata No.- 475/5 over built-up area of 1,85,262.81 sqm of Mouza- Patia of Sri Aman Agrawal.
4. The total plot area is 20234.26 sq.mt with total built-up area 185262.81 sq.mt.
5. **Location and Connectivity** - The proposed site is located at Patia, Bhubaneswar, Odisha over an area of 5.0 Acres of land at Plot No.: 309/1694 & Khata No.- 475/5. The Geographical co-ordinate of the project site is Latitude - 20° 21’ 32. 68” N & Longitude - 85° 49’ 36. 64” E. and the area comes under Survey of India Toposheet No- 73H/15. Project site is well connected with roads. Project site abuts Shikharchandi road in South direction and Nandankanan road in East direction. Patia railway station and Bhubaneswar new junction railway station is at approx. 2.1 km, NE and 2.3 km SE respectively. Biju Patnaik International Airport is at approx. 12 km in South direction.
6. The site is coming under which Development Authority- Bhubaneswar Municipal Corporation.
7. The Building Details of The Project:

<b>S. No.</b>	<b>Description</b>	<b>Area (sq m)</b>
i)	<b>Plot Area</b>	<b>20234.26</b>
ii)	Road Affected Area	14.89
iii)	Net Plot Area	20219.37
iv)	Ground Coverage (21.17 %net plot area)	4281.53
v)	FAR (@6.86 of net plot area) including club	138791.82

S. No.	Description	Area (sq m)
vi)	Basement Area Lower Upper	37,001.02 18500.51 18500.51
vii)	Non-FAR Area	9,469.97
viii)	<b>Built-up Area</b>	<b>185262.81</b>
ix)	Green Area (27.92 % net plot area)	5645.34 sqm
x)	Trees	253
xi)	Height	116.55 m
xii)	No of Dwelling Units	696

8. **Statutory clearances obtained are -**

- Permission has applied near Central Ground Water Authority (CGWA) vide application No. 21-4/4061/OR/INF/2022.
- Application submitted near DFO; Fire for Fire Safety recommendation certificate of the proposal vide application no.- FSR1204130052022000777 dated on 22.06.2022.
- Airport Authority of India letter no. BHUB/EAST/B/072721/ 564999 dated on 18-08-2021.

9. **Power requirement:** Maximum power demand for the project during construction and operation phase is estimated to be 200 kVA and 8000 kVA respectively. Source of power will be Odisha State Electricity board. DG set of total capacity 4250 kVA (1750 kVA X 2 + 750 kVA) will be provided as power back- up during power failure. Solar roof top system of total 66 KW is provided with 206 no of solar plates.

10. **Water requirement:** Water requirement during construction phase is approx. 20-25 KLD. Source of water during construction phase will be private water tankers. Source of water during operation phase will be Municipal supply supplemented with ground water. Permission will be obtained from concerned authority prior extraction of ground water. Total water requirement during operation phase is 481KLD out of which fresh water requirement is 332 KLD. Sewage generation from the site is expected to be 442 KLD which will be treated in STP of capacity 560 KLD proposed to be constructed at the site.

11. **Rain Water harvested** through 22 nos. of Rain Water recharging pits. .

12. **Fire fighting Installations:** The fire protection system for the building is to be designed as per the provisions of National Building Code - 2005 and the directions of local fire service authority. In addition to above, the fire extinguisher system is to be design in accordance with IS: 2190.

13. **Parking** - Parking area required is 41,637.55 sq m and proposed parking area is 42,000 sq m and 2797 ECS.

14. **Green Belt Development:** Green belt will be developed over an area of 5645.34 sqm which is 27.92 % of the total plot area. 253 No. of plants to be planted.

15. **Solid Waste Management:** It is estimated that approx. 1813 kg per day (0.5 kg per capita per day for the residents, 0.15 kg per capita per day for the visitor. 0.25 kg per capita per day for the staff members, whereas 0.2 kg/acre/day is considered for landscape waste) to be generated from project site. The solid waste will be segregated at source & collected.

Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site. Bio-degradable (will be composted through organic waste converter). Recyclable wastes will be disposed to govt. or SPCB approved third party vendors. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Horticultural Waste is composted and used for gardening purposes.

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Recyclable (kg/day)	Non-Recyclable (kg/day)
1.	Residents	3480	0.5	1740	522	1218
2.	Staff	70	0.25	17.5	5.25	12.25
3.	Visitors	70	0.15	10.5	3.15	7.35
4.	Landscape waste	0.5 acres	0.2 kg/acres	0.12	0	0.12
5.	STP sludge	442 KLD	--	45	0	45
<b>Total Waste Generated</b>				1813	530	1283

16. The estimated project cost is ` 688 cr and cost for EMP is ` 207 lacs (capital cost).

17. The project proponent along with the consultant **M/s P & M SOLUTION, Noida** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solution, Noida**, the SEAC prescribed the following specific ToRs in addition to standard ToRs as per **Annexure – B** for conducting detailed EIA study.

- i) Clear site layout showing all features of the project and distance from road.
- ii) Possibility to explore water requirement from IDCO.
- iii) Traffic Study Report to be submitted and vetted from reputed institute.
- iv) Structural Stability certificate from appropriate authority as per BDA guidelines be submitted and vetted from reputed institute.
- v) Detailed calculation of Rain Water Harvesting and Layout showing Rainwater Harvesting pits. Increase more recharging pits with 50% recharge
- vi) Layout map showing the treated water fallout to nearest drain and its distance.
- vii) Layout of internal drainage map and their fallout to external public drain.
- viii) Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain.
- ix) Reduce discharge of treated water to drain by planting more trees.
- x) The greenbelt to be provided along the outer periphery of the plot along the boundary the spacing maybe reduced to 2m x 2m to accommodate more trees and should be planted on a hierarchical pattern.

- xi) The concept of vertical garden may also be considered apart from landscaping, potted plants, Parks & Gardens.
- xii) The water Treatment Plant, Waste Water Treatment Plant, STP, DG set's location to be marked in the layout plan.
- xiii) Adequate overhead portable water tank to be provided as per the norms apart from Treated Waste Water tank for use in dual plumbing system for the flush in the toilet.
- xiv) To submit Sabik RoR with Kisam and HaL RoR with Kisam to rule out involvement of Forest and DLC land in the project.
- xv) For parking of various types of vehicle adequate provision of basement, Stilt, Open area and Mechanical parking may be considered.
- xvi) Provision of lift with ventilation, lighting and AC from lowest basement to terrace roof top to be provided.
- xvii) Bio-diversity register to be prepared for the existing fellow lands and plan for conservation of the same after completion of the construction activities as per Biodiversity Conservation Act, 2003.
- xviii) Efforts for Energy Conservation in the project as per Bureau of Energy Conservation in line with Energy Conservation Act, 2003 to be submitted for the project.
- xix) Disaster Management Plan for the project may be prepared and submitted as per Disaster Management Act, 2005.

**ITEM NO. 09**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR TIRINGPAHAR IRON & MANGANESE MINE FOR REGULARIZATION OF EXISTING EC UNDER THE PROVISIONS OF EIA, 2006 AND ENHANCEMENT OF PRODUCTION OF MN ORE FROM 0.85LTPA (0.98LTPA ROM) TO 5.38LTPA (ROM) AND PRODUCTION OF IRON ORE FOR 6.889LTPA (ROM) AT VILLAGES GURUDA, PALASA (KHA), JADIBAHAL & KHONDBONDH, BARBIL TEHSIL, KEONJHAR DISTRICT FOR M/S TATA STEEL LIMITED OF MR. SABYASACHY MISHRA – AMENDMENT TOR**

1. The proposal was is for amendment of Terms of Reference for Tiringpahar Iron & Manganese Mine for regularization of existing EC under the provisions of EIA, 2006 and enhancement of production of Mn Ore from 0.85LTPA (0.98LTPA ROM) to 5.38LTPA (ROM) and production of Iron Ore for 6.889LTPA (ROM) at villages Guruda, Palasa (Kha), Jadibahal & Khondbondh, Barbil Tehsil, Keonjhar District for M/s Tata Steel Limited of Mr. Sabyasachy Mishra.
2. Tiringpahar Iron & Mn Mine was granted Environmental Clearance (EC) under EIA 1994 Notification vide Ministry's Letter No. J-11015/87/2004-IA. II (M) on 17th November 2005 for production of 0.85 LTPA of Manganese Ore.
3. The mine is located over ML area of 169 ha at Palsha (Kha), Khondbond, Jaribahal and Gurda villages of Keonjhar district in the state of Odisha.
4. The ML area consist of 133.174 ha of Forest Land & 35.826ha Non-Forest Land. Out of which Stage-II (Final) forest clearance has been obtained over 52.348ha of forest land and Stage-I forest clearance over balance forest land of 80.826ha.

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5. This proposal initially was submitted in accordance with the ministry's notification no S.O(E)1530 dated 06.04.2018, for ratification of previously granted EC from EIA 1994 to EIA 2006 notification.
6. This was deferred by the EAC in its 37th meeting dtd. 24th Oct 2018 on account of the observed violation attributed to excess production for year 2006-07 i.e. 86715 Tonnes as against the approved EC capacity of 85000 TPA.
7. The Ministry re-examined the case and vide its letter no. J-11015/117/2018-IA.II(M) dtd. 14th Dec 2018 directed Department of Forest & Environment, Government of Odisha, to initiate credible action against the project proponent under section 19 of Environment (Protection) Act, 1986.
8. Accordingly, credible action against the lessee was initiated by filing a case bearing no 2 CC 81 of 2020 in the court of JMFC Barbil and the status of the same was communicated to Ministry by Dept. of Forest & Environment, GoO vide its letter no FNV-I-24/2018/17434/F&E, dtd. 06-11-2020.
9. Subsequently, the Ministry was pleased to reconsider the proposal in its 27th EAC meeting held during 3rd Feb to 5th Feb 2021 and granted us the Terms of Reference on 4th March 2021 for ratification of our existing EC from EIA 1994 to EIA 2006 regime.
10. In order to include the proposed expansion plans, an application for the amendment of TOR granted earlier was submitted, on 20 July 2021, which was returned in the present form (30th July 2021) on account of the stay imposed by Hon'ble Madras High court on Ministry's SOP for dealing with violation case.
11. Based on the verbal suggestion by Hon'ble EAC, for the other proposals involving ratification and expansion, a fresh application was made in Form I on 16th Feb 22. This was heard by the Hon'ble EAC on 28th March 2022 in its 48th EAC (Non-Coal) however it was returned in the present form with a written suggestion to seek amendment in the TOR granted on 4th March for inclusion of the expansion in manganese ore & inclusion of iron ore as a new product.
12. Now in view of the above suggestion by EAC and Ministry's notification vide SO no: 1886(E). Dated 20th April 2022, the present proposal is applied before SEIAA, Odisha as the leasehold area is less than 250 Ha i.e: 169 Ha.
13. The company had submitted the proposal for the ratification of the existing EC from EIA 1994 to EIA 2006 notification for which the ministry has approved TOR on 4th March 2021.
14. The proposed expansion aims at
  - Expansion in production capacity of Manganese ore from 0.85 LTPA to 5.38 LTPA (ROM)
  - Production of Iron ore (New Product) for 6.889 LTPA (ROM)
  - With overburden generation of 41.62 LTPA (Peak) & total excavation of 52.36 LTPA.
15. The Tiringpahar mining lease is located at Palsha, Khondbond, Jadibahal and Guruda village at Barbil tahasil in Champua sub-division of Keonjhar district in Orissa. The deposit at Guruda block of Tiringpahar lease is located at about 25 km from Barbil town.
16. **Location and Connectivity** - The area falls under survey of India Topo Sheet Nos. 73 G/5 (New Topo Sheet Nos. F 45N/5). It is bounded between Latitudes 21°54'00" N to 21°57'00" N &



longitudes 85°23'00" E to 85°25'00" E. The project with mine lease area of 169.0ha is a Category B project as the Mining lease is less than 250 ha. The deposit at Tiringpahar is located at about 25 km from Barbil town. Nearest railhead is at Banspani at 10 km which is connected by Tata Barbil branch line of SouthEastern Railway at Padapahar.

17. **Requirement of Project:** - The mine is an operational opencast mine operated with shovel-dumper combination for production of Manganese ore for 0.85LTPA. Presently, The Company is planning and implementing a growth plan targeting to enhance the production of steel from 18.5 MTPA to 30 MTPA by 2025-26. Targeted production of 30MTPA shall be achieved by expansion of steel Plant at Jamshedpur from 11 MTPA to 13 MTPA, steel plant at Kalinganagar, Odisha from 3 MTPA to 8 MTPA and rest through recently acquired Tata Steel BSL (located at Angul, now named as Tata Steel Meramundali) and at Tata Steel Long products ltd (Located at Gamharia). Accordingly, the requirement of ferro alloys will increase for which ore requirement will also increase. To cater to the enhanced requirement of ore, expansion of Tiringpahar Iron & Manganese Mines has been envisaged.
18. **Statutory clearances obtained -**
  - Status of Environment Clearance** - The project has previously obtained the Environmental Clearance from the MoEF vide Letter no. J-11015/87/2004-IA II(M) dt 17.11.2005 for production of 85000 TPA of Manganese Ore as per the EIA notification 1994. The public hearing for the project was held on 29.09.2004.
  - Status of Forest Clearance** - The forest land within the ML area of 169 Ha consists of 133.174 ha Forest Land and 35.826 ha Non-Forest Land. Stage –II Forest clearance over an area of 52.348 has been obtained vide MoEF, Govt. of India letter no. 8-80/2004-FC, Dt.28.03.2007 and Stage-I clearance for balance forest area 80.826 ha by MoEF&CC vide letter F.No. 8-01/2019-FC, dated 02.08.2019.
  - Consent to Operate** - The project has also obtained the Consent to operate for production level at 85000 TPA of Manganese Ore under Air (Prevention and Control of Pollution) Act, 1981 & Water (Prevention and Control of Pollution) Act, 1974 from State Pollution Control Board, Orissa. (Consent Order No.115, valid up to 31.03.2025).
19. **Water Requirement** - The present water consumption for the project 56 KLD however this will increase with proposed expansion to 225KLD. The project has already been accorded with permanent water allocation order by Dept. of Water Resource, Govt. of Odisha vide allocation order ref No. 7397/WR/WR-MAJII-WRC-0012/2020 (OSWAS) dtd.13-03-2020 for withdrawal of 0.4CUSEC from Baitarani River.
20. **Power Requirement** - The supply of electrical energy for the mining complex is received from local electrical sub-station of TPNODL. The power requirement for the Mining complex is presently around 39744 Kw-h (in 2020-21). However, a rise of around 45-55 % w.r.t the present level is envisaged for the proposed expansion. It is presently sourced from distribution network of TPNODL and this will continue in future.
21. Baseline Environmental Monitoring has been already carried out during Pre monsoon Season (Mar2020- May 2020). Environmental monitoring has been carried out for various aspects like micro-meteorology, Ambient air quality, Ambient noise levels, Surface & Ground water quality, Hydro-geology, soil quality, biological environment, socio-economic studies etc.

22. Life of Mine - The proposed expansion is planned with an expected life of 8 years, till the expiry of lease i.e.31st March 2030.
23. The project proponent along with the consultant **M/s Vimta Labs Ltd., Hyderabad** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Vimta Labs Ltd., Hyderabad**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent:

- i) Details of NEERI suggestions and its implementation programmes.
- ii) Compliance to NEERI recommendation for Manganese mine expansion to be submitted.
- iii) Details Dump management existing and proposed expansion.
- iv) Traffic Study Report to be submitted.
- v) Compliance Report to previous EC conditions duly certified by the Regional office MoEF&CC, Bhubaneswar.
- vi) Specific measures taken Manganese poisoning in that area.
- vii) Fruiting plants should be taken for plantation.
- viii) Copies of compliance to all ADS by the MoEF&CC, Govt. of India and copies of minutes of all meetings of EAC of MoEF&CC, Govt. of India.

#### **ITEM NO. 10**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR KHATKURBAHAL (NORTH) BLOCK LIMESTONE MINE (M.L. AREA- 156.43 HA) WITH LIMESTONE PRODUCTION CAPACITY OF 1.6 MILLION TPA AT VILLAGES KHATKURBAHAL & PHALSAKHANI, TEHSIL KUTRA, DISTRICT SUNDERGARH, ODISHA W.R.T INCLUSION OF MINOR MINERAL DOLOMITE (2.4 MTPA) FOR SALE, INSTALLATION OF 600 TPH CAPACITY CRUSHER FOR DOLOMITE WITHIN ML AREA AND PERMISSION FOR SALE OF LIMESTONE (UP TO 1.6 MTPA) IN OPEN MARKET FOR M/S. SHIVA CEMENT LIMITED OF SRI MAONJ KUMAR RUSTAGI – MOD EC**

1. The proposal is for Modification of Environmental Clearance of Khatkurbahal (North) Block Limestone Mine (M.L. Area- 156.43 ha) with limestone production capacity of 1.6 million TPA at Villages Khatkurbahal & Phalsakhani, Tehsil Kutra, District Sundergarh, Odisha w.r.t inclusion of minor mineral Dolomite (2.4 MTPA) for sale, installation of 600 TPH capacity crusher for Dolomite within ML area and permission for sale of limestone (up to 1.6 MTPA) in open market for M/s. Shiva Cement Limited of Sri Manoj Kumar Rustagi.
2. This is a proposal of Shiva Cement Limited for getting Amendment in existing Environment Clearance Letter No J-11015/47/2020-IA-II(M) dated 17.03.2022 granted by MoEF&CC in favor of Shiva Cement Limited for Khatkurbahal (North) Block Limestone Mine (M.L. Area- 156.43 ha) with limestone production capacity of 1.6 million TPA at Villages Khatkurbahal & Phalsakhani, Tehsil Kutra, District Sundergarh, Odisha w.r.t inclusion of minor mineral Dolomite (2.4 MTPA) for sale, installation of 600 TPH capacity crusher for Dolomite within ML area and permission for sale of limestone (up to 1.6 MTPA) in open market .
3. **Location and Connectivity** - The mine is situated near Villages- Khatkurbahal & Phalsakhani, Tehsil Kutra, District Sundergarh, Odisha. The latitude is 22° 16'45.31025" N to 22°

17°10.12835" N and 84° 27'36.13496" E to 84° 29'18.22107" E. The project falls under Category" B" Project or Activity 1(a) – 4 for "Mining of Minerals" as per MoEF&CC, Govt. of India Notification as the Mining Lease Area is less than 250 ha.

4. M/s. Shiva Cement Limited has an existing Cement Plant with clinker production capacity 3.0 million TPA & Cement 2.0 million TPA at Village Telighana. Tehsil- Kutra, District Sundargarh, Odisha. Environment clearance has been obtained from MoEFCC vide File No J-11011/84/2008-IA.II (I) dated 23.03.2022. To meet the limestone requirement of cement plant, company has two mines:
  - Khatkurbahal Limestone & Dolomite Mine (ML Area- 72.439 ha) with Production Capacity 1.5 million TPA Near village – Khatkurbahal & Kulenbahal, Tehsil – Kutra, District – Sundergarh (Odisha). Environment Clearance for the same has been obtained from SEIAA, Odisha vide letter No 37895/62-MINB1/11-2021 dated 11.03.2022.
  - Khatkurbahal (North) Block Limestone Mine (M.L. Area- 156.43 ha) with limestone production capacity of 1.6 million TPA at Villages Khatkurbahal & Phalsakhani, Tehsil Kutra, District Sundergarh, Odisha. Environment clearance has been obtained from MoEFCC vide File No J-11015/47/2020-IA.II (I) dated 17.03.2022.
5. Project Proposal is for Amendment in Existing Environment Clearance vide Letter No J- 11015/47/2020-IA-II(M) dated 17.03.2022 granted by MoEFCC in favor of Shiva Cement Limited for Khatkurbahal (North) Block Limestone Mine (M.L. Area- 156.43 ha) with limestone production capacity of 1.6 million TPA at Villages Khatkurbahal & Phalsakhani, Tehsil Kutra, District Sundergarh, Odisha w.r.t inclusion of minor mineral Dolomite (2.4 MTPA) for sale, installation of 600 TPH Crusher for Dolomite and also permission for sale of limestone (upto 1.6 MTPA) in open market . Letter of Intent (LOI) as per Rule 10(2) of the Mineral (Auction) Rules, 2015 for grant of Mining Lease for Limestone was issued by the Government of Odisha in favor of M/s. Shiva Cement Limited for Khatkurbahal (North) Block Mine (ML Area 156.43 ha) vide letter no. 9010/S&M, Bhubaneswar dated 18.11.2019 and a corrigendum in LOI w.r.t area correction was issued on 14.02.2020. It may be noted that this auctioned mine is a merchant block with no end use condition. Environment Clearance has been granted by MoEF&CC vide letter No. J-1105/47/2020. IA. II (M) dated 17.03.2022 for Khatkurbahal (North) Block Limestone Mine (M.L. Area- 156.43 ha) for total excavation of 5.543 million TPA [Limestone 1.6 MTPA and Mineral Reject 0.035 MTPA (ROM 1.635 million TPA), Top soil 0.033 million TPA and waste 3.875 million TPA (covering 2.42 million TPA of Dolomite as waste)]. Now, Shiva Cement Limited has a proposal to utilize Dolomite as a minor mineral for which Revised LOI has been issued with inclusion of Dolomite by the Department of Steel & Mines, Government of Odisha vide letter no 1216/S&M, (AE) (Exp.) SM-05/2021, Bhubaneswar dated 02.02.2021. With the utilization of Dolomite as a minor mineral for sale, there will be no change in proposed total excavation (i.e. 5.543 million TPA) as permitted in the existing Environment Clearance of the above mine. Approval of Modification in Mining Plan w.r.t inclusion of Dolomite has also been issued by the Ministry of Mines (IBM) vide letter no MPM/A/01/-OR/BHU/2021-22 dated 24.04.2021.
6. **Reason For Amendment:** Both Limestone and dolomite resources are considered for the valuation of resource in the Tender document of Khatkurbahal (N) block and both the minerals were taken into account for the calculation of upfront payments and performance

security. Limestone resource is 49 Million MT whereas Dolomite resource is 76 Million MT which is ~ 1.5 times of limestone resource. However, without excavation of dolomite, limestone cannot be extracted as limestone is overlain by dolomite. The Avg sale price per ton of Limestone as on Feb'2022 is INR 421.00 whereas the Avg sale price per ton of Dolomite as on Mar'2021 is INR 795.00. Considering the depth of limestone availability and its exploitation, the economic viability of the project is wholly dependent on the sale of dolomite. Dolomite mineral was inadvertently not mentioned in the initial Lol issued to Shiva Cement Ltd. Secondly, the District Survey Report (DSR) of Dolomite which is a pre-requisite for filing application for EC of minor minerals. was also not available with the state govt. at the time of issue of Lol. Since the execution of our captive cement plant was already in progress, SCL had to apply for EC for Limestone only while considering the entire quantity of Dolomite, i.e. 2.4 Million TPA as waste as suggested by the non-coal mining EAC, MoEF&CC. The environmental impact assessment of mining and stacking of 2.4 Million TPA dolomite (considered as waste) has already been carried out during the EIA studies. Now, District Survey Report (DSR) of Dolomite has been issued by the District Collector on 28-02-2022, SCL has applied for amendment in the existing environment clearance (EC) w.r.t inclusion of minor mineral Dolomite, 2.4 million TPA for sale in open market without increasing the total excavation, i.e., 5.543 million TPA in order to utilize Dolomite (minor mineral) as a mineral which was earlier categorized as waste. 600 TPH crusher is also proposed for crushing of Dolomite within ML area. In addition, since this is a merchant mine with no end use restrictions. Company is also seeking amendment in the existing EC for grant of permission for sale of limestone (up to 1.6 MTPA) in open market.

7. The project proponent along with the consultant **M/s J.M. EnviroNet Pvt. Ltd., Gurugram-122011 (Haryana)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s J.M. EnviroNet Pvt. Ltd., Gurugram-122011 (Haryana)**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent:

- i) Copy of modified approved mining plant incorporating dolomite as a product and addition of 650 TPH Crusher.
- ii) Approval of the Steel and Mines Deptt., Govt. of Odisha for selling of dolomite as an Ore.
- iii) Copy of EIA report prepared for grant of EC for 1.6 MTPA limestone and 2.4 MTPA dolomite as waste.
- iv) Detailed writeup as to why this will not be treated as a fresh case for grant of EC including conducting public hearing.
- v) Kisam of the Land.
- vi) Open market Sale or Sales/ marketing of the product is beyond the scope of SEAC for EC and hence, be deleted from the application for EC.

## **ITEM NO. 11**

### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR DEVELOPMENT OF PRIVATE HOUSING PROJECT 2.191 ACRES OF LAND AT PLOT NO.: 336/2120, 336/3046, 336/3035, 336/2764, 336, 336/3221, 334/2272 KHATA NO- 703/362, 703/1499, 703/1496, 703/1222, 703/2256, 703/1720, 703/559, OVER AN BUILT UP AREA – 47957.9 SQ.M NEAR NH-16 ROAD, AT-PATRAPADA, BHUBANESWAR , DIST – KHORDHA FOR M/S. UTKAL BUILDERS LTD OF SRI RAKESH BHURA – MOD EC**

1. The proposal is for Modification of Environmental Clearance of M/s. Utkal Builders Ltd. for Development of Private Housing Project 2.191 Acres of land at Plot No.: 336/2120, 336/3046, 336/3035, 336/2764, 336, 336/3221, 334/2272 Khata No- 703/362, 703/1499, 703/1496, 703/1222, 703/2256, 703/1720, 703/559, over an built up area – 47957.9 SQ.M Near NH-16 Road, at-Patrapada, Bhubaneswar , Dist – Khordha of Sri Rakesh Bhura.
2. Environmental Clearance from SEIAA vide letter no. 1739/SEIAA, dated 16.07.2021 of total built up area is 33,621.35 sqm and total nos. of floor is 17 nos. in Residential Block & 4 Nos. in Commercial Block, but due to height restriction from Airport Authority of India we have reduce the 5 nos. of floor in Residential Block & increased the 8 Nos. of Floor in Commercial Block (Convenient Store) & revised the built up area i.e. 47,957.94 sqm.
3. **Location and Connectivity** - The proposed site is located at Patrapada, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude -20° 14' 44.81" N & Longitude - 85° 46' 32.78" E. The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road). The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South West direction. The nearest airport is Biju Pattnaik Airport Bhubaneswar at a distance of approx. 13.4 Km in South-West direction from project site. The site is located adjacent to the local landmarks, Haridaspur Mosque, Jagannath Temple, Pahala Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-05 Road.
4. **Meteorology:** The maximum temperature is about 36.0° C and the minimum temperature is 16.0° C felt in the area. The average annual rainfall in the area is 1326.16 mm.

#### **5. Building Details of The Project:**

<b>Total Plot Area</b>	:	<b>8,866.66 sqm</b>
Kisam of Land	:	Gharabari
Residential Builtup Area	:	33,350.98 sqm
Commercial Builtup Area	:	14,606.96 sqm
<b>Total Builtup Area</b>	:	<b>47,957.94 sqm</b>
<b>Total FAR Area</b>	:	<b>36,535.71 sqm</b>
Ground Coverage	:	3,015.00 sqm
Road & Paved Area	:	2,483.00 sqm
Green Belt Area	:	1,793.52 sqm
Total Parking Area	:	11,922.22 sqm
Height of the Building	:	42.00 m

6. **Water requirement:** Fresh make up of **104.0 m<sup>3</sup>/day** will be required for the project which will be sourced from Ground water. Waste water of 132.1 KLD will be treated in a STP of 150 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Near Drain.

7. **Power requirement:** The daily power requirement for the proposed building is preliminarily assessed as 1376 KW. In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 320 KVA capacities for power back up in the proposed Building Project.

For energy conservation, there will be 33 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so

Energy conservation by using Solar Street Lighting =  $33 \times 72 = 2376$  watt = 2.4 KW

Energy conservation by using Solar lighting for common area = 151.8 KW

Total Energy Conservation =  $(151.8+2.4)$  KW = 154.2 KW

Total Energy saving =  $154.2/1376 = 0.1120 \times 100 = 11.2 \%$

8. **Rain Water Harvesting:** Rain Water will be harvested through 6 nos. of recharging pits.

9. **Firefighting Installations:** Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the guideline of NBC (part-4).

10. **Green Belt Development:** Green belt will be developed over an area of 1,793.52 sqm which is 20.23 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.

11. **Solid Waste Management:** From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.45 kg/person/day, which will be about 476.1 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured beans. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste. Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 45.0 kg/day

Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers. Around 66.0 kg/day of STP sludge will be generated.

Solid Waste from Residential Population - 476.1 kg/day

Solid Waste from Commercial Population- 45.0 kg/day

STP Sludge - 66.0 kg/day

**Total Solid Waste Generation - 587.1 kg/day**

12. The Estimated Project cost is ` 40 Crores and Environment Management Cost is ` 220 Lakhs

13. The project proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

- i) Structural Stability certificate from appropriate authority as per BDA guidelines be submitted and also for revise plan also with corresponding studies made for both approved original plan and revised approved plan.
- ii) Certificate from chartered civil engineer how much construction has been made for both approved original plan and revised approved plan.
- iii) Comparative statement in terms of physical features in original plan and present plan.
- iv) Compliance Report to Previous EC conditions duly certified by Regional Officer of MoEF & CC.
- v) Permission from Water Resources deptt. For usage of ground water in commercial complex.
- vi) Approval from Fire Safety Dept. for 6m fire tender corridor for high rise building of 40m height.
- vii) As per BDA norms, is ground coverage for the project is 35% of total area?
- viii) Justification as to why this will not be treated as a violation case.
- ix) Impact and effect of change in ground coverage with reference to the original approved plan and the revised plan.

#### **ITEM NO. 12**

**PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR EXTENSION OF VALIDITY OF TIME PERIOD AND CHANGE IN OCCUPIER NAME IN THE ENVIRONMENTAL CLEARANCE ISSUED IN RESPECT OF BHIKAMPALI QUARTZITE MINES OVER AN ML AREA 4.897 HA. FOR PRODUCTION OF QUARTZ @ 23075 CUM/ANNUM OR 61149 TPA FOR M/S OCL INDIA LTD (NOW KNOWN AS DALMIA CEMENT BHARAT LTD) OF SRI SMRUTI RANJAN PANDA - MOD EC**

1. This proposal is for Extension of validity of Time Period and change in occupier name in the Environmental Clearance Issued in respect of Bhikampali Quartzite Mines over an ML area 4.897 ha. for production of Quartz @ 23075 Cum/annum or 61149 TPA for M/s OCL India Ltd (now known as Dalmia Cement Bharat Ltd) of Sri Smruti Ranjan Panda.
2. The Bhikampali Quartzite Mines was granted in favor of M/s OCL India Ltd (now known as Dalmia Cement Bharat Ltd) vide letter no 111(D) S.M-7/99-7015 /SM Bhubaneswar date 30.06.2000 for period of thirty years .
3. The Lease deed was executed on 18th January,2001 for period of 30 years i.e. till 17.01.2031.
4. Operation was commenced from 02.05.2002. Subsequently, a suit was filed before the National Company Law Tribunal (NCLT), Chennai bench by M/S Dalmia Cement (Bharat) Limited for amalgamation of group Companies of Dalmia Bharat Group and NCLT vide Order dated 20.04.2018 have allowed merger of OCL India Limited to Dalmia Cement (Bharat) Limited (DCBL). Accordingly, Government of Odisha, Steel and Mines Department

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have allowed the change of name of Bhikampali Quartzite Mines from OCL India Limited to Dalmia Cement (Bharat) Limited vide their proceeding No. 8310/S&M, Bhubaneswar dated 11.10.2021 .

5. Consent to Operate has been revised for change in occupier from M/ s OCL India Ltd to M/s Dalmia Cement (Bharat) Limited vide Letter no 1386-IND-II-CON- Mines-17 Dated 26.10.2021.
6. Initially, the project was granted with Environmental clearance vide letter no: 6861 dt. 16.07.2016 for the period up to 2016-17 issued by DEIAA, Jharsuguda (Copy attached as Annexure-III. Thereafter, the EC was renewed for the period 2017-18 to 2021-22 vide letter No 3324/dt 12.04.2018. **The validity of EC as has been extended vide letter no 4919/SEIAA 19.07.2022.**
7. However, as per provision of EIA Notification 2006 and subsequent amendments thereto and the Office memorandum of MoEF&CC (IAD) vide letter No- F.No. 22-28/2020IA.III (E141622) dated 11.02.2022 and direction from Hon'ble High court of Odisha in WP. (c) No 25211/2013 the validity of Environmental clearance is extended to the project life subjected 30 years to the maximum.
8. In the meantime, as per the scheme approval by the NCLT to effect merger of OCL India Limited to Dalmia Cement Bharat Ltd. the Government of Odisha has also issued change of name vide their letter No8310 S& M, Bhubaneswar dated 11.10.2021.
9. In view of the above facts and submission, we would request your authority to kindly extend/issue the Environment Clearance to coterminous with the lease granted to us with change in occupier name from OCL India Ltd to Dalmia Cement Bharat Ltd .
10. The project proponent along with the consultant **M/s Global Tech Enviro Experts Pvt. Ltd., Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Global Tech Enviro Experts Pvt. Ltd., Bhubaneswar**, the SEAC opined that since, the SEIAA has already extended the validity period of EC, no further action is to be taken by the SEAC and proposal to be returned to the SEIAA, Odisha.

### **ITEM NO. 13**

#### **PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR RESIDENTIAL COMPLEX FOR TATA STEEL EMPLOYEES AT KALINGANAGAR INDUSTRIAL COMPLEX OVER AN AREA 14.74 HA LOCATED AT- VILLAGE KHURUNTI & GADAPUR, JAJPUR FOR M/S. TATA STEEL LIMITED OF SRI RAJIV KUMAR – MOD EC**

1. This proposal is for Residential Complex for Tata Steel Employees at Kalinganagar Industrial Complex over an area 14.74 ha located AT- Village Khurunti & Gadapur, Jajpur for M/s. Tata Steel Limited.
2. Environment Clearance for Residential Complex of M/s Tata Steel Ltd located at Kalinganagar Industrial Complex at Khurunti & Gadapur, Dist Jajpur was granted vide letter number SEIAA/4669 dated 17.08.2015 for period of 7 (seven) years which is valid up to 16.08.2022.
3. The project total plot area is 2,02,204 Sq. m with developed of built-up area 1,47,380 Sq. m (Including parking).

Proceedings of the SEAC meeting held on 03.08.2022

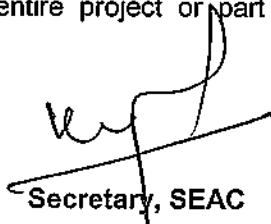
**Environmental Scientist, SEAC**



4. Consent to Operate granted from OSPCB on 04th April 2018 valid till 31st March 2023.
5. Substantial progress has been made in construction of the township, but the project could not be completed within the stipulated time frame due to disruption of work because of surge in Covid-19 cases in the country during FY'21 and FY'22.
6. This is for EC validity extension for residential complex of M/S TATA Steel employees at Kalinganagar Industrial Complex, Jajpur, Odisha w.r.to Gazette Notification S.O. 1807(E) dated 12th April 2022 of Ministry of Environment Forest and Climate Change, Govt of India.
7. Necessary permissions i.e Fire Safety Certificate from Directorate General Fire Services, Odisha on 31/01/2019 and Occupancy certificate from Kalinganagar Development Authority on 14/03/2019 and 26.04.2022 has been obtained.
8. The services and utilities are implemented to create an environmentally sensitive and sustainable township - e.g. organic treatment of solid waste and wastewater treatment in STP, harnessing solar energy for hot water and PV electricity generation, rainwater harvesting, ecology driven landscape strategy, resource saving fixtures and equipment, passive solar strategies and natural ventilation in building design, etc.
9. Measures are being taken for preventions, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management in compliance with the prescribed statutory norms and standards.
10. The project proponent made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent

- i) Progress of the Project in form of Bar chart.
- ii) Compliance of EC conditions stipulated in 2015 duly certified by Regional Office MoEF&CC, Bhubaneswar.
- iii) Compliance report of CTE & CTO duly certified by the Regional Office, SPCB, Jajpur.
- iv) Clarification regarding obtaining of Occupancy Certificate for the entire project or part project completion may be submitted.

  
Secretary, SEAC

**STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT  
IMPACT ASSESSMENT STUDY FOR DISTILLERIES AND INFORMATION TO BE  
INCLUDED IN EIA/EMP REPORT**

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**A. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR DISTILLERIES**

- 1) List of existing distillery units in the study area along with their capacity and sourcing of raw material.
- 2) Number of working days of the distillery unit.
- 3) Details of raw materials such as molasses/grains, their source with availability.
- 4) Details of the use of steam from the boiler.
- 5) Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
- 6) Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
- 7) Proposed effluent treatment system for molasses / grain-based distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
- 8) Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
- 9) Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank.
- 10) Action plan to control ground water pollution.
- 11) Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
- 12) Details of bio-composting yard (if applicable).
- 13) Action plan to control odour pollution.
- 14) Arrangements for installation of continuous online monitoring system (24x7 monitoring device)

**B. STANDARD TERMS OF REFERENCE**

- 1) Executive Summary
- 2) Introduction
  - i. Details of the EIA Consultant including NABET accreditation
  - ii. Information about the project proponent
  - iii. Importance and benefits of the project
- 3) Project Description
  - i. Cost of project and time of completion.
  - ii. Products with capacities for the proposed project.

- iii. If expansion project, details of existing products with capacities and whether adequate lands available for expansion, reference of earlier EC if any.

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- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantitative ) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
  - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.
  - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

#### 4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements,

etc shall be included. (notrequired for industrial area)

- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green fieldprojects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition processand expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro- meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be basedCPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

#### 7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

#### 8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casualworkers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

#### 9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations

of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

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- 10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
- 11) Enterprise Social Commitment (ESC)
  - i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
- 12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- 13) A tabular chart with index for points wise compliance of above TOR.

**STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR TOWNSHIP/ AREA DEVELOPMENT PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT**

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- 1) Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
- 2) Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- 3) Examine baseline environmental quality along with projected incremental load due to the project.
- 4) Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- 5) Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project
- 6) Submit the details of the trees to be felled for the project.
- 7) Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- 8) Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- 9) Ground water classification as per the Central Ground Water Authority.
- 10) Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- 11) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water. Examine details.
- 12) Examine soil characteristics and depth of ground water table for rainwater harvesting.
- 13) Examine details of solid waste generation treatment and its disposal.
- 14) Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
- 15) DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- 16) Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- 17) A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- 18) Examine the details of transport of materials for construction which should include source and availability.



- 19) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- 20) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- 21) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 22) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.